# PUBLIC HEALTH REPORTS

VOL. 34 AUGUST 1, 1919 No. 31

## THE TREATMENT OF HAY FEVER.

By WILLIAM SCHEPPEGRELL, A. M., M. D., President American Hay Fever Prevention Association; Ex-president American Academy of Ophthalmology and Otolaryngology; Chief of Hay Fever Clinic, Charity Hospital, New Orleans, La.

### Hygienic Measures.

Hygienic measures are as important in the control of hay fever as they are in the case of typhoid fever, malaria, yellow fever, and other preventable diseases. By living in a weed-infected neighborhood a patient greatly increases the difficulties of his immunization and frequently necessitates the raising of his immunity to 85 per cent when ordinarily 70 per cent would be sufficient. In all cases treated at the Hay Fever Clinic at the Charity Hospital, patients are given charts of nine blocks of their neighborhood, with instructions to locate thereon lots that are infested with weeds. When this has been done, the charts are sent to the city board of health, which notifies the owners of the lots to cut the weeds under penalty of prosecution for violating the grass-weeds ordinance.

In order to demonstrate the efficiency of such measures, the American Hay-Fever-Prevention Association in 1916 employed special inspectors to cooperate with the regular force of the New Orleans Board of Health, with the result that the number of spring hay-fever cases of that year was reduced to less than 50 per cent. As the fall hay fever in Louisiana is due to the ragweeds, *Ambrosias*, whose potential radius[1] is ten times greater than that of the grasses which cause the spring hay fever, the benefit in the fall cases was much less marked, as the pollen blew in from the surrounding country.

In the selection of homes, hay-fever subjects should choose localities distant from weed-infested areas. The pollen of the grasses, and of the summer hay-fever weeds generally, does not ordinarily travel very far, and a mile is usually a safe distance. The pollen of the ragweeds and other fall hay-fever weeds, however, is very buoyant, and in windy weather may travel 3 to 5 miles.

During their attacks of hay fever patients should avoid localities infested with weeds generally, and especially with those weeds to whose pollen they are sensitive. Should their neighborhood be infected with weeds, and a grass-weeds ordinance be in force, this

[1] Hay fever and Hay fever Pollens. W. Scheppegrell, M. D. Archives of Internal Medicine, June, 1917.

condition should, in the interest of public health, be reported to the board of health.

During the hay-fever season patients should avoid driving or riding into suburbs abounding in weeds. An attack resulting from this increased exposure may lower their resistance and make them more susceptible to the pollen of their own neighborhood.

A reasonable amount of exercise is beneficial; but this should be taken without increased exposure to the hay-fever pollens. Swimming, especially in salt water, is an excellent form of exercise.

Considerable literature is published each year in the lay press regarding the benefit of the "cold storage" treatment of hay fever. As practically all ventilation is excluded in this treatment, there is an absence of atmospheric pollen, which is the principal cause of the relief which the patients experience. The low temperature, however, instead of being a benefit, is really a source of danger, as we have had several cases of bronchitis which resulted from such exposure. In any event, the relief is only transient and can be as well obtained in any room from which the pollen-laden air is excluded.

### Effects of Rain.

It is well known that a continued rain affords relief to hay-fever patients. The action of the rain is to cause precipitation of the pollen floating in the air and to prevent more pollen from leaving the plant during the continuation of the rain. If this condition continues long enough the effects of the inhaled pollen pass off, and the patient has relief until the rain is over and a wind of sufficient velocity again fills the air with the hay-fever pollen.

It has been supposed that the pollen which is precipitated by the rain may again be carried into the air and continue its irritating effect. This, however, is not the case. The principal varieties of pollen have been tested in our biological laboratory and it has been found that the submersion of the pollen in a large amount of water removes its toxic properties. After the pollen has been exposed in this way, it has been tested in large numbers in the nostrils of hay-fever subjects without producing any apparent effect. Several hundred pollen were frequently inhaled without effect by hay-fever subjects who ordinarily react to a small number of fresh pollen.

### Screening, Masks, and Inhalers.

The result of this investigation is of practical value in certain cases of hay fever. When a hay-fever subject has been operated on or is seriously ill from other causes so that the irritation of sneezing and other symptoms of hay fever would not only be annoying but even dangerous, the patient may be protected by having the windows of his room screened with thin cloth saturated with water. All pollen

coming in contact with the moist cloth would not only be arrested but robbed of its toxicity.[1]

When this method of screening is not practicable, a special inhaling mask, based on the same principle and serving the same purpose, may be arranged for the patient.

There are on the market a number of widely advertised inhalers for the prevention of hay fever. The device is inserted into the nostrils, and a fine gauze is supposed to filter the inhaled air free from hay-fever pollens. Aside from the question as to whether a mesh with openings of 0.05 cm. prevents the entrance of pollens 0.0015 cm. in diameter, we were unable to find a patient who did not prefer the hay fever to the discomfort of wearing the inhaler.

### Diet.

The diet of hay-fever subjects during the hay-fever season should be light as regards food rich in protein, such as meat, fish, eggs, cheese, and milk. Farinaceous food may be taken in moderation. Vegetables are of benefit, as is fruit also.

High seasoning should especially be avoided, as it frequently reacts on the membranes of the nostrils already irritated by the pollen. Alcoholic drinks are injurious.

In cases complicated by asthma, the rules regarding diet should be carefully observed, and it is preferable in these cases to have the principal meal during the middle of the day.

There are certain articles of food that should be avoided in special cases; but these vary within such wide limits that no specific rules can be formulated. In one case, for instance, an attack of hay fever could be aggravated by a piece of watermelon; in another by peaches. Mustard and pepper should be avoided, and occasionally, also, tea and coffee.

### Surgical Methods.

While abnormal nasal conditions in their relationship to hay fever have been given undue importance by some rhinologists, they should, nevertheless, be given careful consideration as forming a predisposing factor in hay fever. In fact, any condition which tends to develop a hypersensitiveness of the nasal mucosa predisposes the patient to an incipient sensitization which tends to result in a persistent form of hay fever.

Marked septal spurs, ridges, or deflections, which cause a concentration of pollen in the obstructed nostril, or which touch the opposite turbinal and thus cause irritation, congestion, and hypersensitiveness, may form an important predisposing cause. Infection of

[1] "Toxicity" here refers to the positive reaction in hay-fever subjects. The existence of a true toxin in these pollens is still under investigation.

the sinuses, especially of the ethmoidal cells, should receive careful attention.

While the percentage of cures from operations on these cases is not high (10 per cent), they should not be overlooked in the prophylaxis of hay fever.

Nasal surgery in hay fever, however, should be avoided except in such conditions as indicated above. In other cases operations are unnecessary inflictions on the patient and are without benefit. One of our patients, a physician, had both inferior turbinals cauterized and then removed and the right ethmoidal cells eviscerated without benefit, and the surgeon had advised a similar operation on the left side. Another patient had nine operations performed, including several electrocauterizations, without perceptible benefit to his hay fever. These cases indicate not only the futility of excessive surgery, but also the distressing character of a disease that would make the patient submit to these repeated ordeals.

In hay fever the electrocautery has probably been used more frequently than any other surgical method. It is based on the idea that in hay fever there is an intumescence of the inferior turbinals which the cicatricial contraction following the cauterization is intended to relieve.

There are few cases, however, that have been benefited by this method, and we have seen many patients who claim that their condition was aggravated by the cauterization. In view of these facts electrocauterization should be avoided in hay fever.

In a series of 707 cases (Series C and D) treated in the hay fever clinic of the Charity Hospital 8 per cent had been operated on for hay fever without apparent benefit.

### Constitutional Treatment.

Calcium chloride or, preferably, the less irritating calcium lactate, is occasionally of benefit in hay fever. It should be given after meals in doses of 15 grains, well diluted.

In cases of hyperacidity, sodium bicarbonate in the effervescent form should be administered. The dose is 15 grains, 3 or 4 times daily. In one of our cases a seasonal cure resulted from the administration of 10 grains of quinine 3 times daily; in other cases it was without benefit. It is indicated that in this case malaria was the predisposing cause, which was corrected by the quinine.

In cases associated with asthma sodium iodide may be administered, preferably 10 to 20 dops of a saturated solution, 3 times daily, and well diluted.

Mercury has also been used in hay fever, and Barton L. Wright, of the United States Navy, reports several cases successfully treated. He prefers the succinimide of mercury, $\frac{1}{8}$ grain in distilled water, this

being injected deeply into the gluteal muscles. He believes that the effects are due to the fact that patients after a mercuric treatment have a peculiar power of resistance to infection of every kind.

### Local Treatment.

Menthol in the form of an oily spray is of benefit in some cases of hay fever, but aggravates the attack in others. Two grains to the ounce of liquid petrolatum is the usual proportion. The following formula gives temporary relief, but tends to establish the cocaine habit:

℞ Epinephrin sol. (1–1000),
2 per cent sol. cocaine.,
Normal saline solution, *aa* f. ʒi.
Sig.—Two drops into each nostril as directed.

Solutions of cocaine and of epinephrin tend to develop a turgescence of the nasal mucosa which aggravates the hay fever. They should therefore, be used only to give relief in severe paroxysms.

The epinephrin and cocaine may also be used in the form of an ointment, but this should be prescribed with the same precautions as the solution.

For the conjunctivitis that frequently accompanies hay fever, five per cent argyrol may be used, or the following may be prescribed:

℞ Sodii biboratis,
Acidi borici, aa. gr. xv
Sodii chloridi, gr. iii
Aquae dest, qs. f. ʒi
Sig.—For eyes as directed.
(Dispense in Stearn's container.)

### Nasal Massage.

As a means of reducing the hypersensitiveness of the nostrils before the opening of the hay fever season, and for correcting the intumescence of the nasal mucosa which frequently remains after the paroxysms have subsided, we use a form of nasal vibratory massage. For this purpose, a mechanical vibrator is used which we first devised in 1908. (Fig. 3.) It is operated by compressed air under a pressure of 50 to 60 pounds. The air drives the piston forward and backward in the cylinder, and this imparts a vibratory movement to the nasal applicator. The arrangement is such that the operation of the applicator in the nasal cavity can be observed. Cotton is attached to the end of the applicator, and a 4 per cent solution of iodized phenol in glycerin is applied to the cotton.

By means of this instrument, a vibratory massage is applied over the inferior turbinal septum and the lower portion of the middle turbinal. At first the massage is made very lightly and only for a short time, but the action is gradually increased as is also the length

of time of application. The massage is usually applied two or three times weekly.

Vibratory massage is a useful supplementary treatment, and, in a small percentage of cases, has resulted in a cure without other methods. It should be discontinued during the hay fever season, when the mucous membrane is irritated by the atmospheric pollens.

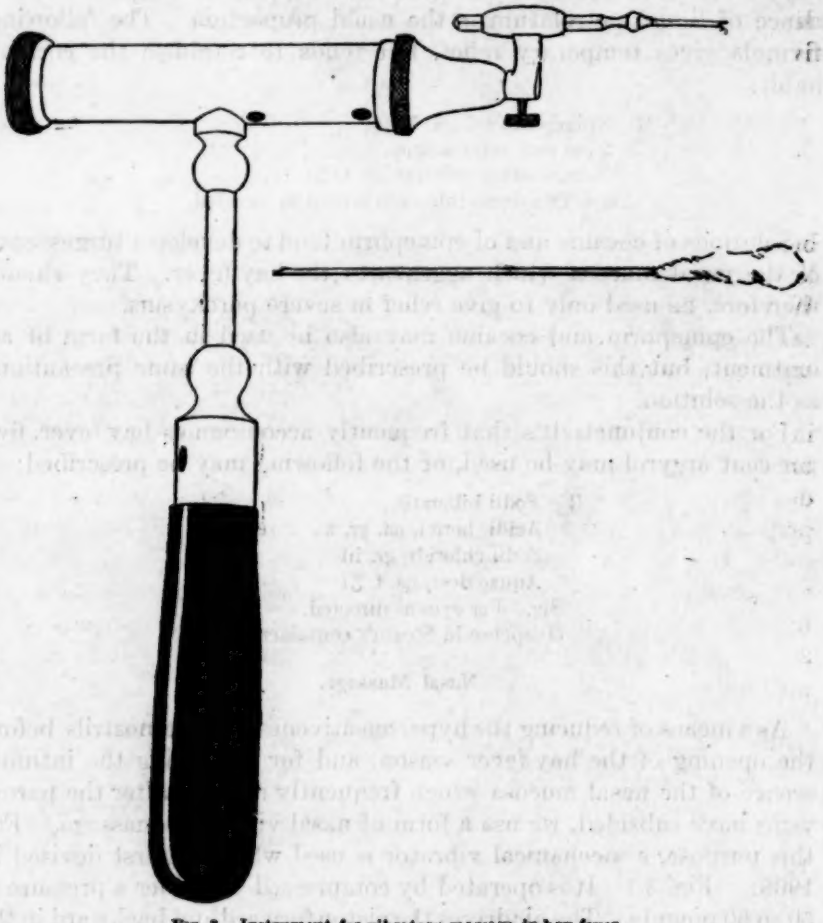

FIG. 3.—Instrument for vibratory massage in hay fever.

### Pollen Therapy.

In all cases in which pollen extracts are used, the diagnostic tests should be applied in order to determine the character and degree of the hay fever reaction. This test consists in injecting into (not under) the skin of the forearm five units of the pollen to be tested. These are determined by the pollenometric records, the principal pollens during the spring being from the grasses and, in the eastern, northern, and southern States, from the ragweeds in the fall.

For the convenience of our clinical records, the result of the intradermal tests is recorded on a percentage basis. A marked wheal, two or more centimeters in diameter, is recorded as 100 per cent, 1 centimeter 50 per cent, etc. While this is an arbitrary scale, it is valuable for purposes of comparison, and is much more definite than such terms as "mild," "marked," "severe," etc.

After the character and degree of the sensitization have been determined, the preventive treatment is commenced by injecting five units of the extract of the pollen to which the patient is sensitive and to which he will be exposed. If he is sensitive, for instance, to the grass pollen, which is prevalent in the spring and early summer, this pollen extract is used for the spring treatment.

If the patient is sensitive to both grass and ragweed pollens, the preventive treatment for the grass pollen is commenced six weeks before the grass season opens, and for the ragweed pollen, the same length of time before the commencement of the ragweed season. We do not consider it advisable to use the combined pollens in these cases, on account of the great difference in the seasons of exposure, and the variation in the degree of sensitiveness to these pollens.

The pollen extracts for the preventive treatment are usually injected two or three times weekly and gradually increased to 100 to 200 units. Large doses are not given because our injections of medium doses have given better results, and also because large doses may produce severe reactions, not only of hay fever and asthma, but also of eczema, urticaria, and angioneurotic edema.

As soon as the specific pollen appears in the atmosphere, as shown by the pollenometric records, the injections should be reduced to 20 to 30 units, as the patient is then exposed to the atmospheric pollens.

### Pollen and Vaccine Therapy.

While our experience has shown that pollen therapy is useful in the treatment of hay fever, we found that there were many cases in which this form of treatment alone did not give satisfactory results. With the majority of patients, therefore, this was combined with the vaccine therapy. The selection of the form of treatment varies according to the patient's condition, which is influenced by the number of atmospheric pollens which he is inhaling, and this, in turn, depends upon the season and the velocity of the prevailing wind. During the early part of the season, when the grasses and weeds are beginning to pollinate, and toward its end when pollination is nearly completed, the number of pollens in the air is relatively small and the patient's attacks are light. During the middle of the season, however, the number is greatly increased with corresponding increased suffering of the patient.

The principal cause of the increase in the hay-fever paroxysms is due to atmospheric disturbances during the active pollinating

season. During a light wind, 1 to 6 miles per hour, pollen is carried only short distances; while in high winds, 15 to 25 miles per hour, pollen in large quantities is carried to great distances (5 miles or more), so that the number may reach 300 to 400 pollens per square yard of air. During the prevalence of such winds, all hay-fever patients in the vicinity of, and who are sensitive to these pollens, suffer greatly.

If the patient applies for treatment during a severe period, the pollen extracts are usually ineffective and a vaccine should be used, this being injected at intervals of one or two days until the severity of the attack subsides. The pollen extract is then used, the vaccine injections being resumed if a severe paroxysm develops.

Our reason for using the vaccine during severe paroxysms is that at this time the patient is suffering not only from the effects of the pollen, but also from the great increase in the pathogenic microorganisms resulting from the lowered resistance of the respiratory membranes. The use of vaccine therapy at this stage is, therefore, logical, and has given us satisfactory results. In a few cases (3 per cent of a series of 707 cases) the treatment of the successful ones was limited to vaccine therapy only.

The question of autogenous and stock vaccines has been carefully considered in our cases. The autogenous vaccines are preferable, provided they can be obtained of the proper standard and purity. When there is any doubt regarding this, the stock vaccines of unquestioned reliability should be given the preference.

We use three forms of vaccines, each containing to the cc. 1,000 millions in various proportions of the following microorganisms: B Friedländer, M. Catarrhalis, Pneumoccoccus, Streptococcus pyogenes, Staphylococcus aureus and albus. As soon as the acute attack has subsided, the extract of the pollen, which has been determined to be responsible for the patient's hay fever, is injected, the dose being 15 to 30 units, which is used at intervals of two or three days.

The exact dose is determined by the reaction in the diagnostic test, careful records of which are kept for each patient. When the reaction has been marked small doses (15 to 20 units) are used, while in other cases this is increased to 20 to 40 units.

Should an acute attack again develop, the bacterial vaccine is substituted for the pollen extract, from one to four injections being made. In many cases, one injection is sufficient to control the symptoms.

In all cases, the treatment is discontinued when the pollenometric records show that the atmospheric pollens responsible for the attack have disappeared. Before this time, however, the treatment is discontinued when the report of the patient indicates the control of the hay fever. In discontinuing the treatments they are at first made at increasingly longer intervals before being stopped entirely.

Fig. 1.—GIANT RAGWEED (AMBROSIA TRIFIDA).

Fig. 2.—COMMON RAGWEED (AMBROSIA ARTEMISIAFOLIA).

In spite of the large number of injections, there have been no cases of infection nor of anaphylactic shock. Tincture of iodine is applied to the skin before and after each injection, except in the diagnostic test, in which case alcohol is applied first and then iodine after the test has been completed.

No restrictions were made regarding the diet in Series C of 400 cases, except in one case in which the symptoms were aggravated by eating peaches or watermelons. Except in this series, we instruct patients to maintain a diet low in proteins, and to refrain from articles known to cause anaphylactic disturbances, such as fish, crabs, shrimps, strawberries, etc.

**Results of Treatment.**

From an analysis of the result in Series C and D (707 cases) we find that there were seasonal cures in 49 per cent of the cases and marked improvement in 40, or satisfactory results in 89 per cent of the total number.

In 4 per cent of the cases, there was little or no perceptible improvement, and 7 per cent discontinued the treatment before the results could be noted. In no case was there any aggravation of the hay-fever symptoms from the treatment or other ill effect.

"Seasonal cure" in these cases indicates that there were no more hay-fever symptoms for the remainder of the season. Before the opening of the following hay-fever season, these cases are again given the diagnostic test. If this is positive, the treatment is repeated. In cases of recent origin, one course of treatment is usually sufficient, but in cases of longer standing two or three courses are required. In some of the cases treated during previous seasons there was no apparent improvement, but the patients had relief from the hay-fever symptoms the following season.

The reason for the difference in the effects of pollen injections is not clearly established. Cooke, Flood, and Coca [1] suggest that if the resulting resistance is due to a gradual saturation or neutralization of an antibodylike substance with the active pollen substance, the union of these two bodies is a much less firm one than that in the more susceptible individuals, and that the active pollen substance is discharged from such a combination and eliminated much more quickly in the former than in the latter.

While the average results in these cases are satisfactory, we believe that the number of seasonal cures will be considerably larger when the advantages of the preventive treatment of hay fever are better understood. In the majority of cases in this series, especially in the hay-fever clinic, the treatment was not begun until the hay fever had actually developed, when the use of pollen therapy is not as effective as the preventive treatment.

[1] The Nature of the Process and Mechanism of the Alleviating Effect of Specific Treatment. Cooke, Flood, and Coca. The Journal of Immunology. February, 1917.

# AN INVESTIGATION OF CHANGES IN THE BLOOD AND URINE RESULTING FROM FATIGUE.

By A. Baird Hastings, Physiological Laboratory of Columbia University, Assistant Sanitary Chemist, United States Public Health Service.

The chemistry of fatigue has attracted the attention of investigators from the time of Du Bois-Reymond who in 1859 reported experiments which showed that a tetanized frog's muscle was more acid than an untetanized one. It had previously been demonstrated that the acidity arising in excised muscles was probably due to lactic acid. Ranke who attempted to identify and study quantitatively the products of muscular contraction, concluded that fatigue resulted from the presence of certain metabolic products and that the activity of the muscle might be restored by the removal of these metabolites by the blood. As individuals of this class of fatigue substances, he named carbon dioxide, potassium acid phosphate, and lactic acid. Lee found evidence that among the products of metabolism in pathological conditions, $\beta$-oxybutyric acid, indol, skatol, and methyl mercaptan had a fatiguing action similar to the above-named substances.

When evidence pointed to the presence of certain substances after fatigue, attention turned to the mechanism of their removal. Much time has been devoted to the investigation of the relation of respiration to fatigue. Geppert and Zuntz concluded that the acceleration of respiration observed during exercise might be attributed to substances which, arising in muscular work, entered into the blood and directly stimulated the respiratory center. Loewy found that if the tissues were supplied with sufficient oxygen during muscular work, the respiratory quotient remained unchanged. Higley and Bowen, in a series of carefully controlled experiments, found that the rate of production of carbon dioxide remained constant for constant work.

Little is to be found in the literature regarding perspiration and muscular fatigue. Viale observed that the concentration of sodium chloride increased during a march. Kittsteiner stated that muscular activity had no direct influence on the acidity of perspiration. Talbert in a preliminary report noted that the hydrogen-ion concentration of perspiration was increased during exercise.

Since Scott has adequately summarized our present knowledge of changes in individual urinary constituents resulting from fatigue, we shall refer only to those observations which have been made on the titratable acidity of the urine. Klupfel reported a few experiments on men from which he concluded that the daily acid content of urine was greater on a day of work than on a day of rest. Sawicki, after performing similar experiments, gave it as his opinion that "the quantity of acid secreted by the urine depends more on the quality and quantity of the food ingested than on rest and work." Aducco later published results which showed that in the course of

fatigue, the urine of dogs became alkaline, due to the presence of alkali carbonates. Benedicenti, in confirmation of Klupfel's observations, found that the urine of marching soldiers was always abnormally acid after a prolonged march.

The attention of the writer has been centered on the hydrogen-ion concentration of the urine and blood plasma, and the alkaline reserve of the latter, as modified by muscular work. The conception of the alkaline reserve of the blood has been clearly defined by Van Slyke and collaborators in connection with their studies of acidosis. The depletion of this reserve alkali might indicate either the presence of acids in abnormal quantities in the organism, or an impaired mechanism for the elimination of the acids produced. Henderson and Haggard have differentiated between a condition of true acidosis and the temporary lowering of the reserve alkali by overbreathing.

That the blood maintains a constant reaction with great persistency, in spite of marked changes in its alkaline reserve, is well known. This constancy, however, may be apparent rather than real. Hasselbalch and Lundsgaard, in their accurate investigation of the reaction of blood at body temperature, found that, with sufficiently delicate methods of determination, changes in the hydrogen-ion concentration of the blood, correlated with changes in $CO_2$ tension within physiological limits, might be detected. Milroy observed a fall in the hydrogen-ion concentration of the blood resulting from pulmonary ventilation. Henderson (1909) has shown that the equation $C_H = K\frac{H_2CO_3}{\gamma NaHCO_3}$ closely expresses the relationship between the hydrogen-ion concentration ($C_H$), the carbon dioxide tension, and the bicarbonate content or alkaline reserve of the blood. It is seen, therefore, that any change in the concentration of either of the variables on the right-hand side of the equation would result in a corresponding change in the other variable in order that the constancy of the reaction of the blood might be preserved.

In contrast with the behavior of the blood, the urine shows comparatively wide variations in its reaction. Henderson (1911) has shown that the normal reaction of the urine varies within the limits of a solution containing mono- and di-sodium phosphate in the approximate ratio of 9 to 1 on the acid side and of 1 to 9 on the alkaline side, corresponding to the hydrogen-ion concentrations of $20 \times 10^{-7}$ and $0.2 \times 10^{-7}$ respectively. The character of the diet is one of the most potent of the many factors influencing the urinary reaction. Our data may be of value in indicating the extent to which fatigue may be regarded as one of these factors.

The studies here to be reported were made for the most part on the urine of men and the blood of dogs. In a limited number of cases, data were obtained on both the urine and blood of the same subjects.

In preliminary experiments, fatigue was induced in the animals by causing them to run in a revolving wheel, such as Mosso employed. Later, a motor-driven treadmill, the speed of which could be varied up to 10 miles per hour, provided a more suitable means of fatiguing the subjects. Data on the reaction of the urine of men at rest were obtained from men convalescing from minor surgical operations. The histories and diets of these men were carefully followed. To obtain our figures on fatigued subjects, we determined the reaction of the urine of men engaged in mechanical operations of various degrees of arduousness at an automobile factory, of men participating in a 12-mile Marathon race, of entrants in a 6-day bicycle race, and of a man on a 10-mile walk. In the case of the latter subject the blood also was studied. Urine specimens were collected at comparable times in each series of experiments.

Blood was drawn from the external jugular vein of the dogs, collected under paraffin oil without exposure to air, oxalated and centrifugated according to the procedure described by Van Slyke. The reaction of the plasma was determined electrometrically with a Clark electrode. In order to obviate the error due to loss of carbon dioxide, additional samples of plasma were admitted into the electrode vessel without changing the gas mixture. This was repeated until the tension of carbon dioxide in the vessel was in equilibrium with that in the plasma. Observations were made at room temperature, which was normally 18° C. The reaction of the urine was also estimated by the hydrogen electrode. The reserve alkali of the plasma was found in our first experiments by titrating it electrometrically according to McClendon's technic; but since the more convenient Van Slyke method for the determination of bound carbon dioxide gave results which, for comparative purposes, had a high degree of accuracy, the latter procedure was later exclusively employed.

In considering the experimental results we shall first present the data obtained from the study of blood, then those obtained from the study of urine. Following Sörensen's notation, all hydrogen-ion concentrations are expressed as $P_H$, the negative exponent of the concentration, $C_H$. Since $C_H = 10^{-P_H}$, a fall in $P_H$ therefore indicates an increase in hydrogen-ion concentration. The alkaline reserve is expressed in cc. of $CO_2$ per 100 cc. of plasma.

### Results of Observations on the Blood.

Table I consists of representative results obtained from 55 experiments on several dogs and rabbits and a man. In all cases a fall in the bound carbon dioxide occurred after exercise, but no measurable change in the reaction of the plasma was found in any of the 10 instances in which it was determined. The extent to which the alka-

line reserve fell after comparable degrees of fatiguing varied with the individual; but in the same subject, under constant conditions of exercise, the percentage drop was essentially the same (Table II).

TABLE I.

| Subject. | Weight in kilograms. | Exercise. | | Plasma determinations. | | |
|---|---|---|---|---|---|---|
| | | Distance in miles. | Rate in miles per hour. | Bicarbonate in volumes per cent $CO_2$. | Percentage fall in bicarbonate. | Hydrogen-ion concentration expressed as $P_H$. |
| Dog A | 13.2 | | | 57.5 | | 7.72 |
| Do | | 43.7 | 6.7 | 47.9 | 16.7 | 7.71 |
| Dog C | 10.0 | | | 53.8 | | 7.65 |
| Do | | 12.3 | 8.2 | 47.9 | 11.0 | 7.65 |
| Dog E | 10.5 | | | 65.3 | | 7.73 |
| Do | | 20.0 | 6.1 | 61.4 | 6.0 | 7.73 |
| Man M | 61.4 | | | 72.9 | | 7.64 |
| Do | | 10.0 | 4.0 | 67.2 | 7.8 | 7.65 |

TABLE II.

*Subject: Dog A. Weight: 13.2 kilograms.*

| Exercise. | | Plasma determinations. | |
|---|---|---|---|
| Distance in miles. | Rate in miles per hour. | Bicarbonate in volumes per cent $CO_2$. | Percentage fall in bicarbonate. |
| 0 | 0 | 57.4 | 0 |
| 34.3 | 7.6 | 49.8 | 13.2 |
| 0 | 0 | 53.7 | 0 |
| 32.2 | 7.3 | 46.0 | 14.3 |

In seven of the experiments, samples of blood were drawn from the subjects at regular intervals in the course of their exercise. The data thus obtained were of two classes:

1. In the instance of the large dog A, whose maximum muscular performance was at no time demanded, there was a continuous drop in the reserve alkali, varying almost as a linear function of the distance, after a rapid initial fall probably attributable to the changed character of the respiration (Table III). It would have been highly desirable to maintain the rate of exercise constant throughout the experiment but this was impracticable. It is noteworthy that an acceleration of the speed of the treadmill during the last quarter of the 65-mile run, caused the bound carbon dioxide to fall more rapidly. Curve (a) of Figure 1 shows this graphically.

TABLE III.

*Subject: Dog A. Weight: 13.2 kilograms.*

| Exercise. | | Plasma bicarbonate in volumes per cent $CO_2$. |
|---|---|---|
| Distance in miles. | Rate during last increment of distance run. | |
| 0 | 0 | 54.7 |
| 12.5 | 8.4 | 46.0 |
| 22.9 | 6.9 | 46.0 |
| 32.1 | 6.2 | 44.1 |
| 39.9 | 6.2 | 42.2 |
| 49.6 | 7.8 | 41.3 |
| 65.5 | 8.0 | 37.5 |

Total distance = 65.5 miles.
Average rate = 7.5 miles per hour.
Total percentage fall in plasma bicarbonate = 31.4.

TABLE IV.

*Subject: Dog C. Weight: 10 kilograms.*

| Exercise. | | Plasma bicarbonate in volumes per cent $CO_2$. |
|---|---|---|
| Distance in miles. | Rate during last increment of distance run. | |
| 0 | 0 | 59.6 |
| 1.3 | 7.7 | 58.2 |
| 7.2 | 7.0 | 54.9 |
| 14.0 | 7.5 | 53.9 |
| 20.0 | 6.2 | 53.9 |
| 23.3 | 3.4 | 53.9 |
| 26.9 | 3.9 | 53.9 |
| 30.7 | 3.6 | 53.9 |
| 34.4 | 4.3 | 53.9 |
| 37.3 | 3.7 | 53.9 |

2. In the instance of smaller dogs, as C, whose capacity for muscular activity was quickly reached by the available speed of the treadmill, the reserve alkali dropped gradually to a point below which it did not fall (Table IV). Then as the dog was unable to run longer at a high rate, the speed of the treadmill was decreased to less than 4 miles per hour. Although he continued to run for a total distance of 37.3 miles, there was no further change in the bicarbonate content of his plasma. This would suggest that a condition of equilibrium obtained in the organism. Curve (b), figure 1, illustrates the difference between this and the above experiment.

The relation between the rate at which the reserve alkali returned to its original concentration and the amount of exercise is shown in Table V. The bicarbonate of a small dog G fell rapidly when he was forced to run a short distance at high speed. The recovery was

complete, however, at the end of one hour of rest. In another instance, when the distance run was relatively greater, the recovery amounted to only 37 per cent of the total fall after two hours of rest. This might be interpreted as pointing to an accumulation of fatigue substances in the organism.

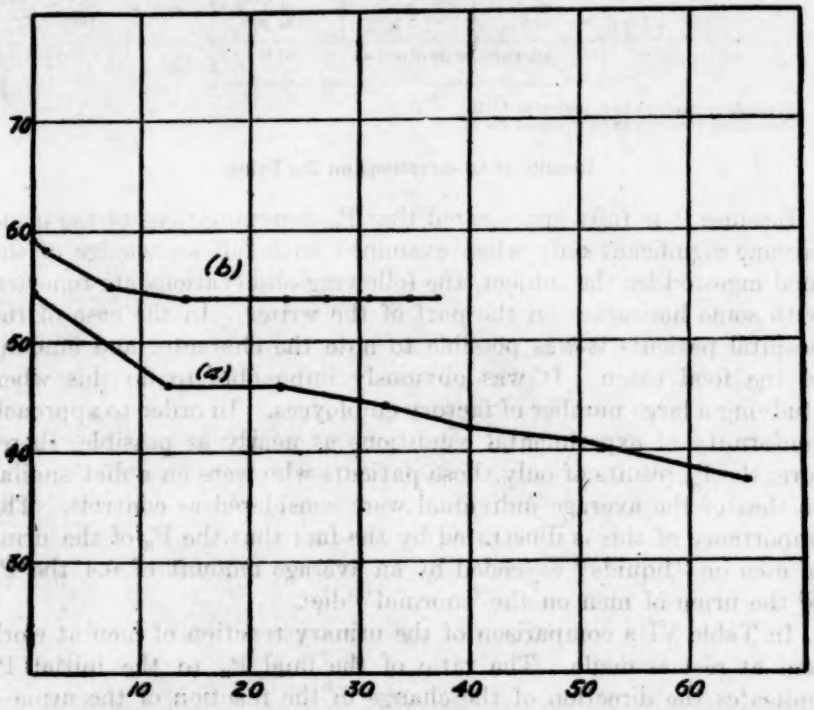


FIG. 1. Graphs representing the change of plasma bicarbonate in (a) a large dog, fatigued at a high rate of exercise, long maintained; and in (b) a small dog, fatigued at a high initial rate which was subsequently decreased. Distance is plotted along the axis of the abscissas in miles. The bound carbon dioxide is plotted along the axis of the ordinates in volumes per cent of $CO_2$.

TABLE V.

*Experiment 1.—Subject: Dog G.*

| Exercise. | | Plasma bicarbonate in volumes per cent $CO_2$. |
|---|---|---|
| Distance in miles. | Rate in miles per hour. | |
| 0 | 0 | 59.5 |
| 1.3 | 7.8 | 44.8 |
| After one hour of rest— | | 59.5 |

*Experiment 2.—Subject: Dog G.*

| Exercise. | | Plasma bicarbonate in volumes per cent $CO_2$. |
|---|---|---|
| Distance in miles. | Rate in miles per hour. | |
| 0 | 0 | 61.4 |
| 20.0 | 7.8 | 46.2 |
| After two hours of rest— | | 51.9 |

Percentage recovery in experiment 1=100.
Percentage recovery in experiment 2= 37.

**Results of Observations on the Urine.**

Because it is fully appreciated that $P_H$ determinations of the urine become significant only when examined with full knowledge of the food ingested by the subject, the following observations are reported with some hesitation on the part of the writer. In the case of the hospital patients it was possible to note the character and amount of the food eaten. It was obviously impossible to do this when studying a large number of factory employees. In order to approach conformity of experimental conditions as nearly as possible, therefore, the $P_H$ results of only those patients who were on a diet similar to that of the average individual were considered as controls. The importance of this is illustrated by the fact that the $P_H$ of the urine of men on "liquids" exceeded by an average amount of 0.4 the $P_H$ of the urine of men on the "normal" diet.

In Table VI a comparison of the urinary reaction of men at work and at rest is made. The ratio of the final $P_H$ to the initial $P_H$ indicates the direction of the change in the reaction of the urine—a value less than unity denoting increased acidity, one greater than unity, decreased acidity.

TABLE VI.—*Summary of $P_H$ determinations on urine.*

| Subjects. | Number of subjects. | Number of observations. | Average $P_H$ of morning urine. | Average $P_H$ of afternoon urine. | Ratio of final to initial $P_H$. |
|---|---|---|---|---|---|
| At rest | 6 | 28 | 5.78 | 5.95 | 1.03 |
| At work | 40 | 289 | 5.77 | 5.68 | 0.98 |

In the case of the control experiments, the average of 28 observations showed that there was a tendency for the reaction of the afternoon specimens of urine to be slightly less acid than those of the forenoon. Of the 289 observations on 40 factory workers, representing 6 different operations, summarized in Table VI, 67.5 per cent showed a greater concentration of hydrogen-ions at the close of the

day's work than at its beginning. This tendency is indicated by the lowered average $P_H$.

In the course of our study of the urine of factory operatives, a series of observations extending over a period of 2 weeks was made on 12 workers in the foundry. Although these men varied in physical strength, as indicated by the Martin spring balance method, they all completed the same number of "cores" during the working shift. The results of these observations were graphically expressed as follows:

The ratio of the $P_H$ of the afternoon urine to that of the forenoon urine was plotted from day to day for each individual. These graphs were then arranged according to the physical strength of the subject—that of the weakest being at the left, that of the strongest at the right. From this chart it was apparent that:

1. The ratios of those subjects who were physically weak showed wide deviations, both negatively and positively, from the base line. This indicated that the concentration of hydrogen-ions of the urine at times decreased and at other times increased after work.

2. The ratios of the physically strong men, however, not only did not exhibit these irregularities, but lay almost without exception above the base line, thus indicating an increased acidity of the urine following work. This observation may be related to the difference in results obtained when studying the effect of fatigue on trained and untrained men.

The urine of the men who participated in the 12-mile Marathon race was, without exception, of a higher degree of acidity after the run than before (Table VII). No reason is known for the high $P_H$ of the urine before the race. It may be significant that these men had been on a special training diet and had eaten luncheon two hours before the race began. The "alkaline tide" may therefore have been an influencing factor.

TABLE VII.—*Marathon runners.*

| Number of subject. | $P_H$ of urine before race. | $P_H$ of urine after race. | Ratio of final $P_H$ to initial $P_H$. |
|---|---|---|---|
| 1 | 6.32 | 5.64 | 0.89 |
| 2 | 7.03 | 6.84 | .97 |
| 3 | 6.27 | 5.12 | .82 |
| 4 | 7.62 | 5.59 | .73 |
| 5 | 7.08 | 5.03 | .71 |
| 6 | 7.67 | 6.94 | .90 |

The results obtained from two men entered in the bicycle race are of interest, because of the difference between the conditions under which they competed (Table VIII). Bd rode frantically toward the close of the week in an attempt to recover distance lost through pen-

alties, but no such extraordinary efforts were required from Bk, who was not thus handicapped. The urine of Bk remained at a practically constant $P_H$ throughout the week, but the urine of Bd became markedly acid on the afternoon of the fourth day and continued so on the fifth, after which he was forced to withdraw from the race, on account of exhaustion. The diets of these men were unaltered during the week.

TABLE VIII.—*Bicycle riders: Bd, Bk.*

| Day of race. | $P_H$ of urine of Bk. | | $P_H$ of urine of Bd. | |
|---|---|---|---|---|
| | 10 a. m. | 10 p. m. | 10 a. m. | 10 p. m. |
| 1 | [illegible] | 6.03 | 5.89 | 5.75 |
| 2 | 6[illegible] | 6.02 | 5.80 | 5.65 |
| 3 | 6.24 | 6.02 | 5.94 | 5.91 |
| 4 | 6.17 | 6.06 | 6.26 | 5.36 |
| 5 | 6.04 | 5.92 | 5.30 | |

The urine of M, whose blood was found to have a lowered bicarbonate content after a 10-mile walk, had a $P_H$ of 4.90 after the exercise as contrasted with a urinary reaction before the exercise of 6.90.

Aducco's observations that the urine of a dog became less acid and even alkaline during exercise were confirmed. Attempts to adjust conditions which would bring about comparable changes in the urinary reaction of men have thus far met with failure. This point requires further investigation.

### Summary of Results.

1. Exercise produced a diminution of the bound carbon dioxide of the blood plasma. The depletion, however, did not progress to such a point that the reaction of the plasma was significantly altered.

2. The lowering of the bound carbon dioxide was a function of the rate and the amount of exercise.

3. The rate at which the bound carbon dioxide returned to its original value was related to the amount of exercise.

4. The urine of men engaged in manual labor tended to be of a slightly higher degree of acidity than that of men at rest. This statement could only be made of the class as a whole, and could not be reliably applied to individuals without accurate knowledge of their diets.

5. The urine of physically strong men was regularly slightly more acid after work than before; the urine of physically weak men showed wide variations in its reactions from day to day.

6. When the muscular activity was such that the subject was intensely fatigued, there was invariably an increase in the hydrogen-ion concentration of the urine.

The experimental work was conducted, for the most part, in the laboratory of the department of physiology of Columbia University under the direction of Prof. Frederic S. Lee. The electrometric measurements were made at the Harriman Research Laboratory through the courtesy of Dr. K. G. Falk and Dr. E. J. Cohen.

**Bibliography.**

Aducco, V., Arch. Ital. Biol., 1887, VIII, 238.
Benedicenti, A., Arch. Ital. Biol., 1897, XXVII, 321.
Clark, W. M., J. Biol. Chem., 1915, XXIII, 475.
Du Bois-Reymond, E., Monatsber. d. kgl. Preuss. Akad. d. Wissensch., 1859, 288.
Geppert, J., and Zuntz, N., Arch. ges. Physiol. (Pflüger), 1888, XLII, 189.
Hasselbalch, K. A., and Lundsgaard, C., Biochem. Z., 1912, XXXIII, 77.
Henderson, L. J., Ergeb. Physiol., 1909, VIII, 254; J. Biol. Chem., 1911, IX, 403.
Henderson, Y., and Haggard, H. W., J. Biol. Chem., 1918, XXXIII, 333.
Higley, G. O., and Bowen, W. P., Am. J. Physiol., 1904, XII, 311.
Kittsteiner, C., Arch. Hyg., LXXIII, 275.
Klupfel, R., Med. Chem. Unters. (Hoppe-Seyler), 1868, III, 412.
Lee, F. S., Brit. Med. Journ., 1906, II, 1806.
Loewy, A., Arch. ges. Physiol. (Pflüger), 1891, XLIX, 405.
McClendon, J. F., J. Biol. Chem., 1918, XXXIII, 19.
Martin, E. G., and Lovett, R. W., J. Am. Med. Assoc., 1916, LXVI, 729.
Milroy, T. H., Quart. J. Exp. Physiol., 1914, VIII, 141.
Mosso, U., Arch. per le Sc. Med., 1887, X, 1.
Ranke, J., "Tetanus," Leipzig, 1865.
Sawicki, A., Arch. ges. Physiol. (Pflüger), 1872, V, 285.
Scott, E. L., Public Health Reports, 1918, XXXIII, 605.
Sörensen, S. P. L., Biochem. Z., 1909, XXI, 131.
Talbert, G. A., Am. J. Physiol., 1919, xlix, 127.
Van Slyke, D. D., and Cullen, G. E., J. Biol. Chem., 1917, XXX, 289.
Viale, G., Atti. accad. Lincei., 1913, XII, 180.

---

## THE NOTIFIABLE DISEASES.

### PREVALENCE DURING 1918 IN CITIES OF OVER 100,000.[1]

**ANTHRAX, CEREBROSPINAL MENINGITIS, DIPHTHERIA, GONORRHEA, INFLUENZA, MALARIA, MEASLES, PELLAGRA, PNEUMONIA (ALL FORMS), POLIOMYELITIS, RABIES IN MAN, RABIES IN ANIMALS, SCARLET FEVER, SMALLPOX, SYPHILIS, TUBERCULOSIS (PULMONARY AND ALL FORMS), AND TYPHOID FEVER—CASES AND DEATHS REPORTED AND INDICATED FATALITIES PER 100 CASES, 1918; AVERAGE NUMBER OF CASES REPORTED DURING RECENT YEARS (1913 TO 1917).**

The following tables include data for all cities of the United States having an estimated population of 100,000 or over. Estimates of population in cities were not made by the Census Bureau as of July 1, 1918, and, therefore, case and death rates were not computed.

[1] It will be noted that some of the cities are apparently much more successful in obtaining reports of the notifiable diseases than are others. This may be due to the greater activity of their health departments or to a greater interest in the public welfare on the part of their practicing physicians. That the health departments of certain cities are securing fairly complete information of the prevalence of preventable diseases is indicated in a number of instances by the large number of cases reported as compared with the numbers of deaths registered from the same causes.

Annual averages of the total cases reported in the various cities during the years 1913–1917 were made for cerebrospinal meningitis, diphtheria, measles, pellagra, poliomyelitis, scarlet fever, smallpox, tuberculosis (pulmonary and all forms), and typhoid fever by adding the numbers of cases and dividing the sum by the number of years for which data were obtainable.

The fatalities per 100 cases reported are given for all diseases except syphilis and tuberculosis (pulmonary and all forms), in which instances cases reported for each death registered are given.

It will be noted that the number of cases of poliomyelitis reported during the year 1918 was decidedly lower than the average for the preceding years. In this connection it should be borne in mind that the year 1916 is included in the averages. During this year an epidemic of poliomyelitis occurred in many parts of the United States.

Cities in which no cases of a certain disease were reported are not included in the table for that disease.

A high fatality rate may mean that the disease was unusually virulent in a city, that the physicians did not treat the disease in that city with the success usual elsewhere, or that the practicing physicians did not report all of their cases to the health department. On the other hand, an unusually low fatality rate may be due to the fact that the disease in the city was unusually mild, that the physicians treated it with unusual success, that the practicing physicians reported their cases satisfactorily, or that the registration of deaths was incomplete, or the assignment of the causes of death inaccurate.

## REPORTED PREVALENCE FOR 1918—AVERAGES FOR PREVIOUS YEARS.

### ANTHRAX.

| City. | Cases reported. | Deaths registered. | Fatalities per 100 cases. | City. | Cases reported. | Deaths registered. | Fatalities per 100 cases. |
|---|---|---|---|---|---|---|---|
| Atlanta, Ga. | 1 | ..... | ..... | Newark, N. J. | 2 | ..... | ..... |
| Boston, Mass. | 4 | 0 | ..... | New Orleans, La. | 3 | 1 | 33.3 |
| Camden, N. J. | 5 | 0 | ..... | New York, N. Y. | 15 | 4 | 26.7 |
| Lawrence, Mass. | 1 | ..... | ..... | Philadelphia, Pa. | 8 | 1 | 12.5 |
| Los Angeles, Calif. | 1 | 1 | ..... | Rochester, N. Y. | ..... | 1 | ..... |
| Lowell, Mass. | 2 | 0 | ..... | San Francisco, Calif. | 1 | 0 | ..... |
| Lynn, Mass. | 1 | 1 | ..... | | | | |

### CEREBROSPINAL MENINGITIS.

| City. | Average. | | | 1918 | | |
|---|---|---|---|---|---|---|
| | Years. | Number of years. | Cases reported. | Cases reported. | Deaths registered. | Fatalities per 100 cases. |
| Albany, N. Y. | 1915–1917 | 3 | 3 | 18 | 7 | 38.9 |
| Atlanta, Ga. | 1917 | 1 | 12 | 7 | ..... | ..... |
| Baltimore, Md. | 1914–1917 | 4 | 36 | 175 | 75 | 42.9 |
| Birmingham, Ala. | 1913–1917 | 5 | 24 | 40 | 12 | 30.0 |
| Boston, Mass. | 1913–1917 | 5 | 57 | 126 | 83 | 65.9 |

## REPORTED PREVALENCE FOR 1918—AVERAGES FOR PREVIOUS YEARS—Continued.

### CEREBROSPINAL MENINGITIS—Continued.

| City. | Average. | | | 1918 | | |
|---|---|---|---|---|---|---|
| | Years. | Number of years. | Cases reported. | Cases reported. | Deaths registered. | Fatalities per 100 cases. |
| Bridgeport, Conn. | 1913-1917 | 5 | 15 | 21 | 4 | 19.0 |
| Buffalo, N. Y. | 1913-1917 | 5 | 21 | 26 | 15 | 57.7 |
| Cambridge, Mass. | 1917 | 1 | 5 | 20 | 3 | 15.0 |
| Camden, N. J. | 1916 | 1 | 3 | 4 | 0 | ..... |
| Chicago, Ill. | 1913-1917 | 5 | 141 | 224 | 93 | 41.5 |
| Cincinnati, Ohio. | 1913-1917 | 5 | 39 | 40 | 26 | 65.0 |
| Cleveland, Ohio. | 1913-1917 | 5 | 72 | 73 | 36 | 49.3 |
| Columbus, Ohio. | 1913, 1915-1917 | 4 | 11 | 10 | 5 | 50.0 |
| Dallas, Tex. | 1915-1917 | 3 | 7 | 10 | 7 | 70.0 |
| Dayton, Ohio. | 1914, 1915, 1917 | 3 | 10 | 19 | 7 | 36.8 |
| Denver, Colo. | 1913-1917 | 5 | 3 | ..... | 3 | ..... |
| Des Moines, Iowa. | 1916-1917 | 2 | 4 | 5 | 4 | 80.0 |
| Detroit, Mich. | 1915-1917 | 3 | 50 | 74 | 23 | 31.1 |
| Fall River, Mass. | 1913-1917 | 5 | 5 | 12 | 7 | 58.3 |
| Ft. Worth, Tex. | 1917 | 1 | 2 | ..... | ..... | ..... |
| Grand Rapids, Mich. | ..... | ..... | ..... | 2 | 2 | ..... |
| Hartford, Conn. | 1914-1917 | 4 | 44 | 11 | 6 | 54.5 |
| Houston, Tex. | 1916-1917 | 2 | 2 | 7 | 2 | 28.6 |
| Indianapolis, Ind. | 1914-1917 | 4 | 22 | 28 | 17 | 60.7 |
| Jersey City, N. J. | 1913-1917 | 5 | 6 | 29 | 30 | ..... |
| Kansas City, Kans. | 1914, 1917 | 2 | 25 | 23 | 26 | ..... |
| Kansas City, Mo. | 1913-1917 | 5 | 36 | 98 | ..... | ..... |
| Lawrence, Mass. | 1913-1917 | 5 | 5 | 10 | 5 | 50.0 |
| Los Angeles, Calif. | 1913-1917 | 5 | 43 | 31 | 16 | 51.6 |
| Louisville, Ky. | 1913-1917 | 5 | 32 | 35 | 19 | 54.3 |
| Lowell, Mass. | 1913-1917 | 5 | 12 | 19 | 9 | 47.4 |
| Lynn, Mass. | 1914, 1916, 1917 | 3 | 4 | 6 | 5 | 83.3 |
| Memphis, Tenn. | 1917 | 1 | 19 | 21 | 11 | 52.4 |
| Milwaukee, Wis. | ..... | ..... | ..... | 20 | 20 | ..... |
| Minneapolis, Minn. | 1915, 1917 | 2 | 79 | 17 | 9 | 52.9 |
| Nashville, Tenn. | 1913-1917 | 5 | 10 | 40 | 23 | 57.5 |
| Newark, N. J. | 1913-1917 | 5 | 30 | 103 | 45 | 43.7 |
| New Bedford, Mass. | 1914-1917 | 4 | 2 | ..... | 3 | ..... |
| New Haven, Conn. | 1914, 1916, 1917 | 3 | 8 | 19 | 12 | 63.2 |
| New Orleans, La. | 1913-1917 | 5 | 29 | 47 | 33 | 70.2 |
| New York, N. Y. | 1913-1917 | 5 | 262 | 477 | 262 | 54.9 |
| Oakland, Calif. | 1917 | 1 | 5 | 7 | 1 | 14.3 |
| Oklahoma City, Okla. | 1913-1915, 1917 | 4 | 6 | 3 | 3 | ..... |
| Omaha, Nebr. | 1914, 1916, 1917 | 3 | 15 | ..... | 39 | ..... |
| Paterson, N. J. | 1915-1917 | 3 | 5 | 14 | 4 | 28.6 |
| Philadelphia, Pa. | 1913-1917 | 5 | 119 | 176 | 101 | 57.4 |
| Pittsburgh, Pa. | 1913-1917 | 5 | 43 | 51 | 30 | 58.8 |
| Portland, Oreg. | 1916 | 1 | 3 | 1 | 3 | ..... |
| Providence, R. I. | 1913-1917 | 5 | 18 | 50 | 29 | 58.0 |
| Reading, Pa. | 1914-1917 | 4 | 2 | 1 | 1 | ..... |
| Richmond, Va. | ..... | ..... | ..... | 9 | ..... | ..... |
| Rochester, N. Y. | 1913, 1914, 1916, 1917 | 4 | 7 | 9 | 9 | ..... |
| Salt Lake City, Utah. | 1913-1917 | 5 | 8 | 5 | 2 | 40.0 |
| San Antonio, Tex. | 1913, 1915-1917 | 4 | 14 | 33 | 17 | 51.6 |
| San Francisco, Calif. | 1913-1917 | 5 | 13 | 41 | 14 | 34.1 |
| Schnectady, N. Y. | 1914-1917 | 4 | 4 | 15 | 5 | 33.3 |
| Scranton, Pa. | ..... | ..... | ..... | 12 | 6 | 50.0 |
| Seattle, Wash. | 1913, 1915-1917 | 4 | 2 | 23 | 5 | 21.7 |
| Spokane, Wash. | 1917 | 1 | 1 | 1 | 0 | ..... |
| Springfield, Mass. | 1913, 1915-1917 | 4 | 5 | 5 | 5 | ..... |

## REPORTED PREVALENCE FOR 1918—AVERAGES FOR PREVIOUS YEARS—Continued.

### CEREBROSPINAL MENINGITIS—Continued.

| City. | Average. | | | 1918 | | |
|---|---|---|---|---|---|---|
| | Years. | Number of years. | Cases reported. | Cases reported. | Deaths registered. | Fatalities per 100 cases. |
| St. Louis, Mo | 1913–1917 | 5 | 68 | 72 | 38 | 52.8 |
| St. Paul, Minn | 1914, 1915, 1917 | 3 | 23 | 7 | 3 | 42.9 |
| Syracuse, N. Y | 1913, 1915, 1917 | 3 | 3 | 3 | 1 | 33.3 |
| Tacoma, Wash | 1914, 1917 | 2 | 1 | 7 | 10 | ..... |
| Toledo, Ohio | 1914–1917 | 4 | 5 | 6 | 5 | 83.3 |
| Trenton, N. J | 1914, 1917 | 3 | 1 | 4 | 2 | 50.0 |
| Washington, D. C | 1913–1917 | 5 | 11 | ..... | 28 | ..... |
| Worcester, Mass | 1913, 1914, 1916, 1917 | 4 | 7 | 29 | 10 | 34.5 |
| Yonkers, N. Y | 1913, 1914 1916 | 3 | 7 | 3 | 3 | ..... |
| Youngstown, Ohio | 1917 | 1 | 28 | 14 | 10 | 71.4 |

### DIPHTHERIA.

| | | | | | | |
|---|---|---|---|---|---|---|
| Albany, N. Y | 1913–1917 | 5 | 120 | 133 | 8 | 6.0 |
| Atlanta, Ga | 1916–1917 | 2 | 182 | 70 | ..... | ..... |
| Baltimore, Md | 1913–1917 | 5 | 1,023 | 671 | 71 | 10.6 |
| Birmingham, Ala | 1913–1917 | 5 | 148 | 188 | 9 | 4.8 |
| Boston, Mass | 1913–1917 | 5 | 2,859 | 2,832 | 217 | 7.7 |
| Bridgeport, Conn | 1913–1917 | 5 | 268 | 384 | 32 | 8.3 |
| Buffalo, N. Y | 1913–1917 | 5 | 828 | 975 | 112 | 11.5 |
| Cambridge, Mass | 1913, 1917 | 2 | 353 | 399 | 13 | 3.3 |
| Camden, N. J | 1914–1917 | 4 | 196 | 157 | 19 | 12.1 |
| Chicago, Ill | 1913–1917 | 5 | 7,759 | 5,708 | 720 | 12.6 |
| Cincinnati, Ohio | 1913–1917 | 5 | 980 | 757 | 43 | 5.7 |
| Cleveland, Ohio | 1913–1917 | 5 | 2,211 | 1,371 | 109 | 8.0 |
| Columbus, Ohio | 1913–1917 | 5 | 385 | 106 | 7 | 6.6 |
| Dallas, Tex | 1915–1917 | 3 | 115 | 46 | 6 | 13.0 |
| Dayton, Ohio | 1913–1917 | 5 | 436 | 141 | 7 | 5.0 |
| Denver, Colo | 1913–1917 | 5 | 314 | 394 | 28 | 7.1 |
| Des Moines, Iowa | 1916–1917 | 2 | 224 | 220 | 21 | 9.5 |
| Detroit, Mich | 1913–1917 | 5 | 2,943 | 2,874 | 270 | 9.4 |
| Fall River, Mass | 1913–1917 | 5 | 177 | 166 | 27 | 16.3 |
| Fort Worth, Tex | 1915–1917 | 3 | 95 | 70 | 8 | 11.4 |
| Grand Rapids, Mich | 1913–1917 | 5 | 210 | 181 | 21 | 11.6 |
| Hartford, Conn | 1914–1917 | 4 | 362 | 262 | 9 | 3.4 |
| Houston, Tex | 1916–1917 | 2 | 96 | 82 | 8 | 9.8 |
| Indianapolis, Ind | 1913–1917 | 5 | 726 | 885 | 80 | 9.7 |
| Jersey City, N. J | 1913–1917 | 5 | 811 | 682 | 53 | 7.8 |
| Kansas City, Kans | 1914, 1917 | 2 | 143 | 132 | 13 | 9.8 |
| Kansas City, Mo | 1913–1917 | 5 | 499 | 343 | ..... | ..... |
| Lawrence, Mass | 1913–1917 | 5 | 225 | 93 | 16 | 17.2 |
| Los Angeles, Calif | 1913–1917 | 5 | 564 | 1,070 | 54 | 5.0 |
| Louisville, Ky | 1913–1917 | 5 | 215 | 305 | 25 | 8.2 |
| Lowell, Mass | 1913–1917 | 5 | 275 | 186 | 17 | 9.1 |
| Lynn, Mass | 1913–1917 | 5 | 212 | 156 | 8 | 5.1 |
| Memphis, Tenn | 1917 | 1 | 474 | ..... | 12 | ..... |
| Milwaukee, Wis | 1913, 1914, 1916, 1917 | 4 | 924 | 430 | 51 | 11.9 |
| Minneapolis, Minn | 1915–1917 | 3 | 1,032 | 1,007 | 88 | 8.7 |
| Nashville, Tenn | 1913–1917 | 5 | 106 | 47 | 8 | 17.0 |
| Newark, N. J | 1913–1917 | 5 | 1,216 | 974 | 82 | 8.4 |
| New Bedford, Mass | 1914–1917 | 4 | 128 | 118 | 19 | 16.1 |
| New Haven, Conn | 1913–1917 | 5 | 288 | 201 | 22 | 10.9 |
| New Orleans, La | 1913–1917 | 5 | 1,293 | 811 | 18 | 2.2 |
| New York, N. Y | 1913–1917 | 5 | 14,618 | 11,455 | 1,245 | 10.9 |
| Oakland, Calif | 1914–1917 | 4 | 155 | 95 | 9 | 9.5 |
| Oklahoma City, Okla | 1913–1917 | 5 | 72 | 46 | 6 | 13.0 |
| Omaha, Nebr | 1913, 1914, 1916, 1917 | 4 | 282 | 427 | 50 | 11.7 |
| Paterson, N. J | 1913–1917 | 5 | 233 | 215 | 14 | 6.5 |

## REPORTED PREVALENCE FOR 1918—AVERAGES FOR PREVIOUS YEARS—Continued.

### DIPHTHERIA—Continued.

| City. | Average. | | | 1918 | | |
|---|---|---|---|---|---|---|
| | Years. | Number of years. | Cases reported. | Cases reported. | Deaths registered. | Fatalities per 100 cases. |
| Philadelphia, Pa. | 1913–1917 | 5 | 2,698 | 2,477 | 376 | 15.2 |
| Pittsburgh, Pa. | 1913–1917 | 5 | 1,484 | 861 | 112 | 13.0 |
| Portland, Oreg. | 1916, 1917 | 2 | 123 | 132 | 17 | 12.9 |
| Providence, R. I. | 1913–1917 | 5 | 782 | 735 | 56 | 7.6 |
| Reading, Pa. | 1914–1917 | 4 | 131 | 161 | 19 | 11.8 |
| Richmond, Va. | 1914–1917 | 4 | 290 | 207 | 13 | 6.3 |
| Rochester, N. Y. | 1913, 1914, 1916, 1917 | 4 | 331 | 367 | 37 | 10.1 |
| Salt Lake City, Utah. | 1913–1917 | 5 | 143 | 246 | 24 | 9.8 |
| San Antonio, Tex. | 1913, 1915–1917 | 4 | 135 | 42 | 8 | 19.0 |
| San Francisco, Calif. | 1913–1917 | 5 | 956 | 641 | 42 | 6.6 |
| Schenectady, N. Y. | 1913–1917 | 5 | 119 | 125 | 9 | 7.2 |
| Scranton, Pa. | 1914–1917 | 4 | 341 | 261 | 26 | 10.0 |
| Seattle, Wash. | 1913–1917 | 5 | 130 | 309 | 24 | 7.8 |
| Spokane, Wash. | 1913, 1916, 1917 | 3 | 38 | 79 | 5 | 6.3 |
| Springfield, Mass. | 1913–1917 | 5 | 221 | 227 | 31 | 13.7 |
| St. Louis, Mo. | 1913–1917 | 5 | 3,288 | 2,274 | 117 | 5.1 |
| St. Paul, Minn. | 1913–1917 | 5 | 687 | 937 | 60 | 6.4 |
| Syracuse, N. Y. | 1913–1917 | 5 | 324 | 267 | 22 | 8.2 |
| Tacoma, Wash. | 1913, 1914, 1916, 1917 | 4 | 59 | 85 | 11 | 12.9 |
| Toledo, Ohio. | 1913–1917 | 5 | 315 | 254 | 28 | 11.0 |
| Trenton, N. J. | 1914–1917 | 4 | 291 | 228 | 28 | 12.3 |
| Washington, D. C. | 1913–1917 | 5 | 681 | 517 | 40 | 7.7 |
| Worcester, Mass. | 1913, 1914, 1916, 1917 | 4 | 322 | 166 | 20 | 12.0 |
| Yonkers, N. Y. | 1913, 1914, 1916, 1917 | 4 | 258 | 162 | 15 | 9.3 |
| Youngstown, Ohio. | 1916, 1917 | 2 | 198 | 120 | 16 | 10.7 |

### GONORRHEA.

| City. | Cases reported. | Deaths registered. | Fatalities per 100 cases. | City. | Cases reported. | Deaths registered. | Fatalities per 100 cases. |
|---|---|---|---|---|---|---|---|
| Atlanta, Ga. | 573 | ..... | ..... | Lowell, Mass. | 4 | 0 | ..... |
| Baltimore, Md. | 560 | 25 | 4.5 | Minneapolis, Minn. | 167 | 8 | 4.8 |
| Birmingham, Ala. | 246 | 2 | .8 | Nashville, Tenn. | 179 | ..... | ..... |
| Boston, Mass. | 329 | ..... | ..... | New Bedford, Mass. | ..... | 1 | ..... |
| Bridgeport, Conn. | 305 | 0 | ..... | New Haven, Conn. | 98 | 0 | ..... |
| Buffalo, N. Y. | ..... | 1 | ..... | New Orleans, La. | 460 | 7 | 1.5 |
| Camden, N. J. | 4 | 0 | ..... | New York, N. Y. | 6,358 | 31 | .5 |
| Chicago, Ill. | 4,152 | 15 | .4 | Oakland, Calif. | 140 | ..... | ..... |
| Cincinnati, Ohio. | 48 | ..... | ..... | Philadelphia, Pa. | 699 | 8 | 1.1 |
| Cleveland, Ohio. | 89 | 15 | 16.9 | Portland, Oreg. | 822 | ..... | ..... |
| Columbus, Ohio. | 11 | 1 | 9.1 | Rochester, N. Y. | 40 | 0 | ..... |
| Denver, Colo. | 3,181 | 0 | ..... | San Francisco, Calif. | 646 | 4 | .6 |
| Detroit, Mich. | 816 | 6 | .7 | Scranton, Pa. | ..... | 1 | ..... |
| Fall River, Mass. | 3 | 0 | ..... | Seattle, Wash. | 462 | ..... | ..... |
| Hartford, Conn. | 211 | 1 | .5 | Spokane, Wash. | 440 | 1 | .2 |
| Houston, Tex. | 517 | 2 | .4 | Tacoma, Wash. | 160 | ..... | ..... |
| Kansas City, Kans. | 118 | ..... | ..... | Toledo, Ohio. | 537 | 14 | 2.6 |
| Lawrence, Mass. | 2 | ..... | ..... | Trenton, N. J. | 4 | 0 | ..... |
| Los Angeles, Calif. | 618 | 0 | ..... | Youngstown, Ohio. | 36 | ..... | ..... |

## REPORTED PREVALENCE FOR 1918—AVERAGES FOR PREVIOUS YEARS—Continued.

### INFLUENZA AND PNEUMONIA (ALL FORMS).

| City. | Influenza. | | | Pneumonia (all forms). | | | Influenza and pneumonia (all forms). | | |
|---|---|---|---|---|---|---|---|---|---|
| | Cases reported. | Deaths registered. | Fatalities per 100 cases. | Cases reported. | Deaths registered. | Fatalities per 100 cases. | Cases reported. | Deaths registered. | Fatalities per 100 cases. |
| Albany, N. Y. | 7,621 | 525 | 6.9 | 754 | 262 | 34.7 | 8,375 | 787 | 9.4 |
| Atlanta, Ga. | 4,808 | 68 | 1.4 | 104 | 747 | ..... | 4,912 | 815 | 16.6 |
| Baltimore, Md. | 22,074 | 1,741 | 7.9 | 4,208 | 3,526 | 83.8 | 26,282 | 5,267 | 20.0 |
| Birmingham, Ala. | 12,868 | 871 | 6.8 | ..... | 615 | ..... | ..... | 1,486 | ..... |
| Boston, Mass. | 9,590 | 4,014 | 41.9 | [1] 2,268 | [2] 2,375 | ..... | [1] 11,858 | [2] 6,389 | ..... |
| Bridgeport, Conn. | 6,739 | 432 | 6.4 | ..... | 707 | ..... | ..... | 1,139 | ..... |
| Buffalo, N. Y. | 28,398 | 1,874 | 6.6 | ..... | 1,405 | ..... | ..... | 3,279 | ..... |
| Cambridge, Mass. | 3,011 | 472 | 15.7 | 330 | 314 | 95.2 | 3,341 | 786 | 23.5 |
| Camden, N. J. | ..... | ..... | ..... | ..... | ..... | ..... | 7,269 | 1,190 | 16.4 |
| Chicago, Ill. | 48,533 | 6,971 | 14.4 | 23,309 | 7,000 | 30.0 | 71,842 | 13,971 | 19.4 |
| Cincinnati, Ohio. | 12,023 | 1,776 | 14.8 | ..... | 702 | ..... | ..... | 2,478 | ..... |
| Cleveland, Ohio. | 26,998 | 2,817 | 10.4 | 2,440 | 1,698 | 69.6 | 29,438 | 4,515 | 15.3 |
| Columbus, Ohio. | ..... | 449 | ..... | ..... | 586 | ..... | 5,283 | 1,035 | 19.6 |
| Dallas, Tex. | 10,677 | 407 | 3.8 | 305 | 424 | ..... | 10,982 | 831 | 7.6 |
| Dayton, Ohio. | ..... | 479 | ..... | ..... | 234 | ..... | ..... | 713 | ..... |
| Denver, Colo. | ..... | 161 | ..... | ..... | 1,730 | ..... | ..... | 1,891 | ..... |
| Des Moines, Iowa. | 7,699 | 282 | 3.7 | ..... | 343 | ..... | ..... | 625 | ..... |
| Detroit, Mich. | 22,273 | 1,385 | 6.2 | 1,388 | 2,429 | ..... | 23,661 | 3,814 | 16.1 |
| Fall River, Mass. | 11,230 | 729 | 6.5 | [1] 444 | [2] 210 | ..... | [1] 11,674 | [2] 939 | ..... |
| Fort Worth, Tex. | 1,624 | 44 | 2.7 | 736 | 709 | 96.3 | 2,360 | 753 | 31.9 |
| Grand Rapids, Mich. | 5,294 | 146 | 2.8 | 599 | 288 | 48.0 | 5,893 | 434 | 7.4 |
| Hartford, Conn. | 27,600 | 692 | 2.5 | 23 | 293 | ..... | 27,623 | 985 | 3.6 |
| Houston, Tex. | 1,008 | 500 | 49.6 | ..... | ..... | ..... | ..... | ..... | ..... |
| Indianapolis, Ind. | 11,570 | 437 | 3.8 | ..... | 956 | ..... | ..... | 1,393 | ..... |
| Jersey City, N. J. | 12,857 | 834 | 6.5 | 587 | 1,535 | ..... | 13,444 | 2,369 | 17.6 |
| Kansas City, Kans. | 8,426 | 125 | 1.5 | 246 | 563 | ..... | 8,672 | 688 | 7.9 |
| Kansas City, Mo. | 10,211 | ..... | ..... | 801 | ..... | ..... | 11,012 | ..... | ..... |
| Lawrence, Mass. | 4,489 | 211 | 4.7 | 187 | 143 | 76.5 | 4,676 | 354 | 7.6 |
| Los Angeles, Calif. | 43,538 | 2,002 | 4.6 | 1,585 | 770 | 48.6 | 45,123 | 2,772 | 6.1 |
| Louisville, Ky. | 10,027 | 149 | 1.5 | 704 | 1,327 | ..... | 10,731 | 1,476 | 13.7 |
| Lowell, Mass. | 7,394 | 164 | 2.2 | 132 | 636 | ..... | 7,526 | 800 | 10.6 |
| Lynn, Mass. | 3,242 | 490 | 15.1 | 266 | 205 | 77.1 | 3,508 | 695 | 19.8 |
| Memphis, Tenn. | 6,531 | 172 | 2.6 | ..... | 824 | ..... | ..... | 996 | ..... |
| Milwaukee, Wis. | 18,339 | 379 | 2.1 | 228 | 1,636 | ..... | 18,567 | 2,015 | 10.8 |
| Minneapolis, Minn. | 15,951 | 990 | 6.2 | ..... | 490 | ..... | ..... | 1,480 | ..... |
| Nashville, Tenn. | 23 | 607 | ..... | 34 | 521 | ..... | 57 | 1,128 | ..... |
| Newark, N. J. | 29,704 | 1,387 | 4.7 | 6,947 | 1,498 | 21.6 | 36,651 | 2,885 | 7.9 |
| New Bedford, Mass. | 14,684 | 88 | .6 | [1] 176 | [2] 1,039 | ..... | [1] 14,860 | [2] 1,127 | ..... |
| New Haven, Conn. | 5,314 | 796 | 15.0 | ..... | 492 | ..... | ..... | 1,288 | ..... |
| New Orleans, La. | 46,843 | 1,752 | 3.7 | ..... | 1,295 | ..... | ..... | 3,047 | ..... |
| New York, N. Y. | 135,949 | 12,562 | 9.2 | 22,662 | 20,628 | 91.0 | 158,611 | 33,190 | 20.9 |
| Oakland, Calif. | 7,094 | 679 | 9.6 | 52 | 345 | ..... | 7,146 | 1,024 | 14.3 |
| Oklahoma City, Okla. | ..... | ..... | ..... | ..... | ..... | ..... | 2,472 | 494 | 20.0 |
| Omaha, Nebr. | 6,524 | 970 | 14.9 | ..... | 415 | ..... | ..... | 1,385 | ..... |
| Paterson, N. J. | 9,138 | 240 | 2.6 | 1,073 | 822 | 76.6 | 10,211 | 1,062 | 10.4 |
| Philadelphia, Pa. | 49,498 | 8,395 | 17.0 | 5,861 | 8,439 | ..... | 55,357 | 16,834 | 30.4 |
| Pittsburg, Pa. | 23,654 | 515 | 2.2 | 2,274 | 4,245 | ..... | 25,928 | 4,760 | 18.4 |
| Portland, Oreg. | 11,635 | 898 | 7.7 | ..... | 257 | ..... | ..... | 1,155 | ..... |
| Providence, R. I. | 24,056 | 941 | 3.9 | ..... | 811 | ..... | ..... | 1,752 | ..... |
| Reading, Pa. | 5,403 | 292 | 5.4 | 73 | 419 | ..... | 5,476 | 711 | 13.0 |
| Richmond, Va. | 18,344 | 586 | 3.2 | ..... | 532 | ..... | ..... | 1,118 | ..... |
| Rochester, N. Y. | 16,134 | 948 | 5.9 | 965 | 504 | 52.2 | 17,099 | 1,452 | 8.5 |
| St. Louis, Mo. | 31,748 | 2,063 | 6.5 | ..... | 2,271 | ..... | ..... | 4,334 | ..... |
| St. Paul, Minn. | 8,343 | 823 | 9.9 | ..... | 341 | ..... | ..... | 1,164 | ..... |
| Salt Lake City, Utah. | 6,848 | 379 | 5.5 | ..... | 231 | ..... | ..... | 610 | ..... |
| San Antonio, Tex. | 11,580 | 196 | 1.7 | 252 | 938 | ..... | 11,832 | 1,134 | 9.6 |
| San Francisco, Calif. | 36,021 | 2,396 | 6.6 | [1] 626 | [2] 1,024 | ..... | [1] 36,647 | [2] 3,420 | ..... |
| Schenectady, N. Y. | 5,200 | 446 | 8.6 | 494 | 177 | 35.8 | 5,694 | 623 | 10.9 |
| Scranton, Pa. | 6,448 | 105 | ..... | ..... | ..... | ..... | ..... | 1,244 | ..... |
| Seattle, Wash. | 19,159 | 1,003 | 5.2 | ..... | 326 | ..... | ..... | 1,329 | ..... |

[1] Includes lobar pneumonia only. [2] Includes pneumonia (all forms).

## REPORTED PREVALENCE FOR 1918—AVERAGES FOR PREVIOUS YEARS—Continued.

### INFLUENZA AND PNEUMONIA (ALL FORMS)—Continued.

| City. | Influenza. | | | Pneumonia (all forms). | | | Influenza and pneumonia (all forms). | | |
|---|---|---|---|---|---|---|---|---|---|
| | Cases reported. | Deaths registered. | Fatalities per 100 cases. | Cases reported. | Deaths registered. | Fatalities per 100 cases. | Cases reported. | Deaths registered. | Fatalities per 100 cases. |
| Spokane, Wash. | 10,432 | 430 | 4.1 | 897 | 105 | 11.7 | 11,329 | 535 | 4.7 |
| Springfield, Mass. | 7,851 | 614 | 7.8 | [1] 852 | [2] 317 | ..... | [1] 8,703 | [2] 931 | ..... |
| Syracuse, N. Y. | 21,189 | 753 | 3.6 | ..... | 451 | ..... | ..... | 1,204 | ..... |
| Tacoma, Wash. | 3,277 | 51 | 1.6 | [2] 488 | 483 | ..... | [2] 3,765 | 534 | ..... |
| Toledo, Ohio. | 7,721 | 523 | 6.8 | 54 | 462 | ..... | 7,775 | 985 | 12.7 |
| Trenton, N. J. | 36,854 | 735 | 2.0 | ..... | 241 | ..... | ..... | 976 | ..... |
| Washington, D. C. | 30,695 | 2,028 | 6.6 | ..... | ..... | ..... | ..... | ..... | ..... |
| Worcester, Mass. | 5,786 | 757 | 13.1 | [1] 1,098 | [2] 537 | ..... | [1] 6,884 | [2] 1,294 | ..... |
| Yonkers, N. Y. | 5,442 | 330 | 6.1 | 310 | 189 | 61.0 | 5,752 | 519 | 9.0 |
| Youngstown, Ohio. | 10,161 | 855 | 8.4 | 64 | 380 | ..... | 10,225 | 1,235 | 12.1 |

### MALARIA.

| City. | Cases reported. | Deaths registered. | Fatalities per 100 cases. | City. | Cases reported. | Deaths registered. | Fatalities per 100 cases. |
|---|---|---|---|---|---|---|---|
| Albany, N. Y. | 1 | 1 | ..... | Minneapolis, Minn. | 1 | 1 | ..... |
| Atlanta, Ga. | 40 | ..... | ..... | Nashville, Tenn. | ..... | 2 | ..... |
| Baltimore, Md. | 4 | 1 | 25.0 | Newark, N. J. | 28 | 0 | ..... |
| Birmingham, Ala. | 167 | 21 | 12.6 | New Orleans, La. | 49 | 16 | 32.7 |
| Boston, Mass. | 13 | ..... | ..... | New York, N. Y. | 55 | 8 | 14.5 |
| Cambridge, Mass. | 1 | ..... | ..... | Oakland, Calif. | ..... | 1 | ..... |
| Camden, N. J. | 5 | 0 | ..... | Paterson, N. J. | 24 | 0 | ..... |
| Cleveland, Ohio. | 2 | 2 | ..... | Philadelphia, Pa. | 4 | 3 | 75.0 |
| Dallas, Tex. | 4 | 7 | ..... | Providence, R. I. | ..... | 1 | ..... |
| Denver, Colo. | 1 | 1 | ..... | Richmond, Va. | 35 | 2 | 5.7 |
| Fall River, Mass. | 3 | 1 | 33.3 | San Antonio, Tex. | ..... | 10 | ..... |
| Fort Worth, Tex. | 4 | 4 | ..... | San Francisco, Calif. | 7 | 3 | 42.9 |
| Jersey City, N. J. | 3 | ..... | ..... | Springfield, Mass. | 1 | 0 | ..... |
| Kansas City, Kans. | 2 | 0 | ..... | St. Louis, Mo. | ..... | 14 | ..... |
| Los Angeles, Calif. | 1 | 1 | ..... | Trenton, N. J. | 3 | 0 | ..... |
| Memphis, Tenn. | 102 | 44 | 43.1 | | | | |

### MEASLES.

| City. | Average. | | | 1918 | | |
|---|---|---|---|---|---|---|
| | Years. | Number of years. | Cases reported. | Cases reported. | Deaths registered. | Fatalities per 100 cases. |
| Albany, N. Y. | 1913–1917 | 5 | 747 | 603 | 1 | 0.2 |
| Atlanta, Ga. | 1917 | 1 | 1,139 | 333 | ..... | ..... |
| Baltimore, Md. | 1913–1917 | 5 | 3,536 | 7,482 | 75 | 1.0 |
| Birmingham, Ala. | 1913–1917 | 5 | 2,016 | 1,694 | 27 | 1.6 |
| Boston, Mass. | 1913–1917 | 5 | 5,085 | 6,319 | 111 | 1.8 |
| Bridgeport, Conn. | 1913–1915, 1917 | 4 | 308 | 296 | 7 | 2.4 |
| Buffalo, N. Y. | 1913–1917 | 5 | 2,835 | 3,375 | 44 | 1.3 |
| Cambridge, Mass. | 1913–1917 | 2 | 1,189 | 1,414 | 30 | 2.1 |
| Camden, N. J. | 1914–1917 | 4 | 326 | 763 | 0 | ..... |
| Chicago, Ill. | 1913–1917 | 5 | 13,140 | 2,663 | 63 | 2.4 |
| Cincinnati, Ohio. | 1913–1917 | 5 | 1,135 | 1,124 | 20 | 1.8 |
| Cleveland, Ohio. | 1913–1917 | 5 | 3,435 | 1,234 | 17 | 1.4 |
| Columbus, Ohio. | 1913–1917 | 5 | 1,053 | 590 | 10 | 1.7 |
| Dallas, Tex. | 1915–1917 | 3 | 1,636 | 25 | 12 | 48.0 |
| Dayton, Ohio. | 1913–1917 | 5 | 873 | 357 | 0 | ..... |

[1] Includes labor pneumonia only.
[2] Includes pneumonia (all forms).
[3] Cases were not reported before the latter part of October.

## REPORTED PREVALENCE FOR 1918—AVERAGES FOR PREVIOUS YEARS—Continued.

### MEASLES—Continued.

| City. | Average. | | | 1918 | | |
|---|---|---|---|---|---|---|
| | Years. | Number of years. | Cases reported. | Cases reported. | Deaths registered. | Fatalities per 100 cases. |
| Denver, Colo. | 1913-1917 | 5 | 2,166 | 2,654 | 2 | .1 |
| Des Moines, Iowa | ..... | ..... | ..... | 86 | 12 | 14.0 |
| Detroit, Mich. | 1915-1917 | 3 | 1,430 | 1,661 | 125 | 7.5 |
| Fall River, Mass. | 1913-1917 | 5 | 711 | 234 | 8 | 3.4 |
| Fort Worth, Tex. | 1915-1917 | 3 | 565 | 54 | 2 | 3.7 |
| Grand Rapids, Mich. | 1913-1917 | 5 | 1,459 | 721 | 0 | ..... |
| Hartford, Conn. | 1914-1917 | 4 | 618 | 447 | 6 | 1.3 |
| Houston, Tex. | 1916-1917 | 2 | 628 | 392 | 7 | 1.8 |
| Indianapolis, Ind. | 1913-1917 | 5 | 4,038 | 1,276 | 3 | .2 |
| Jersey City, N. J. | 1913-1917 | 5 | 1,317 | 1,182 | 21 | 1.8 |
| Kansas City, Kans. | 1914, 1917 | 2 | 467 | 709 | 7 | 1.0 |
| Kansas City, Mo. | 1913-1917 | 5 | 1,892 | 1,573 | ..... | ..... |
| Lawrence, Mass. | 1913-1917 | 5 | 444 | 1,532 | 35 | 2.3 |
| Los Angeles, Calif. | 1913-1917 | 5 | 3,774 | 3,903 | 12 | .3 |
| Louisville, Ky. | 1913-1917 | 5 | 248 | 406 | 4 | 1.0 |
| Lowell, Mass. | 1913-1917 | 5 | 571 | 501 | 8 | 1.6 |
| Lynn, Mass. | 1913-1917 | 5 | 557 | 305 | 1 | .3 |
| Memphis, Tenn. | 1917 | 1 | 2,640 | 519 | 4 | .8 |
| Milwaukee, Wis. | 1913-1914, 1916, 1917 | 4 | 2,566 | 6,394 | 54 | .8 |
| Minneapolis, Minn. | 1915-1917 | 3 | 1,281 | 1,323 | 26 | 2.0 |
| Nashville, Tenn. | 1913-1917 | 5 | 655 | 591 | 15 | 2.5 |
| Newark, N. J. | 1913-1917 | 5 | 4,094 | 7,779 | 120 | 1.5 |
| New Bedford, Mass. | 1914-1917 | 4 | 616 | 400 | 2 | .5 |
| New Haven, Conn. | 1913-1917 | 5 | 721 | 365 | 9 | 2.5 |
| New Orleans, La. | 1913-1917 | 5 | 2,876 | 992 | 22 | 2.2 |
| New York, N. Y. | 1913-1917 | 5 | 28,433 | 28,675 | 790 | 2.8 |
| Oakland, Calif. | 1914-1917 | 4 | 484 | 1,055 | 1 | .1 |
| Oklahoma, Okla. | 1913-1917 | 5 | 456 | 293 | ..... | ..... |
| Omaha, Nebr. | 1914, 1916, 1917 | 3 | 541 | 651 | 0 | ..... |
| Paterson, N. J. | 1913-1917 | 5 | 594 | 2,103 | 16 | .8 |
| Philadelphia, Pa. | 1913-1917 | 5 | 9,842 | 13,722 | 119 | .9 |
| Pittsburgh, Pa. | 1913-1917 | 5 | 5,199 | 5,683 | 91 | 1.6 |
| Portland, Oreg. | 1916, 1917 | 2 | 1,400 | 3,357 | 24 | .7 |
| Providence, R. I. | 1913-1917 | 5 | 419 | 2,300 | 54 | 2.3 |
| Reading, Pa. | 1914-1917 | 4 | 760 | 1,001 | 4 | .4 |
| Richmond, Va. | 1914-1917 | 4 | 2,128 | 1,424 | 8 | .6 |
| Rochester, N. Y. | 1913, 1914, 1916, 1917 | 4 | 1,504 | 2,155 | 27 | 1.3 |
| Salt Lake City, Utah | 1913-1917 | 5 | 1,491 | 798 | 9 | 1.1 |
| San Antonio, Tex. | 1913, 1915-1917 | 4 | 262 | 140 | 7 | 5.0 |
| San Francisco, Calif. | 1913-1917 | 5 | 2,433 | 1,720 | 11 | .6 |
| Schenectady, N. Y. | 1913-1917 | 5 | 797 | 402 | 2 | .5 |
| Scranton, Pa. | 1914-1917 | 4 | 699 | 133 | ..... | ..... |
| Seattle, Wash. | 1913-1917 | 5 | 2,361 | 1,572 | 16 | 1.0 |
| Spokane, Wash. | 1913, 1916, 1917 | 3 | 1,934 | 37 | 1 | 2.7 |
| Springfield, Mass. | 1913-1917 | 5 | 653 | 990 | 13 | 1.3 |
| St. Louis, Mo. | 1913-1915, 1917 | 4 | 6,329 | 2,137 | 19 | .9 |
| St. Paul, Minn. | 1913-1917 | 5 | 1,594 | 507 | 3 | .6 |
| Syracuse, N. Y. | 1913-1917 | 5 | 1,417 | 2,125 | 54 | 2.5 |
| Tacoma, Wash. | 1913, 1914, 1916, 1917 | 4 | 775 | 249 | 3 | 1.2 |
| Toledo, Ohio | 1913-1917 | 5 | 1,854 | 360 | 4 | 1.1 |
| Trenton, N. J. | 1914-1917 | 4 | 448 | 346 | 4 | 1.2 |
| Washington, D. C. | 1913-1917 | 5 | 3,010 | 7,001 | 48 | .7 |
| Worcester, Mass. | 1913, 1914, 1916, 1917 | 4 | 600 | 304 | 7 | 2.3 |
| Yonkers, N. Y. | 1913, 1914, 1916, 1917 | 4 | 697 | 1,126 | 13 | 1.2 |
| Youngstown, Ohio | 1916-1917 | 2 | 1,587 | 370 | 9 | 2.4 |

## REPORTED PREVALENCE FOR 1918—AVERAGES FOR PREVIOUS YEARS—Continued.

### PELLAGRA.

| City. | Average. | | | 1918 | | |
|---|---|---|---|---|---|---|
| | Years. | Number of years. | Cases reported. | Cases reported. | Deaths registered. | Fatalities per 100 cases. |
| Baltimore, Md. | 1915 | 1 | 1 | 5 | 5 | |
| Birmingham, Ala. | 1915–1917 | 3 | 111 | 129 | 104 | 80.6 |
| Boston, Mass. | 1915–1917 | 3 | 11 | 2 | 3 | |
| Buffalo, N. Y. | | | | | 1 | |
| Cambridge, Mass. | | | | 1 | | |
| Chicago, Ill. | | | | | 6 | |
| Cincinnati, Ohio. | 1916 | 1 | 2 | 0 | | |
| Cleveland, Ohio. | 1916–1917 | 2 | 1 | 1 | 1 | |
| Columbus, Ohio. | | | | 1 | 1 | |
| Dallas, Tex. | 1915-1917 | 3 | 32 | | 34 | |
| Denver, Colo. | 1917 | 1 | 1 | 1 | 1 | |
| Des Moines, Iowa. | | | | | 2 | |
| Detroit, Mich. | 1915, 1916 | 2 | 1 | | 1 | |
| Fall River, Mass. | 1915, 1917 | 2 | 1 | | 1 | |
| Fort Worth, Tex. | | | | 20 | 20 | |
| Hartford, Conn. | 1915, 1917 | 2 | 1 | | 1 | |
| Houston, Tex. | 1917 | 1 | 30 | 13 | 21 | |
| Indianapolis, Ind. | 1916–1917 | 2 | 1 | | | |
| Kansas City, Kans. | 1917 | 1 | 1 | 1 | 0 | |
| Kansas City, Mo. | 1915, 1917 | 2 | 1 | | | |
| Los Angeles, Calif. | 1915–1917 | 3 | 7 | 9 | 6 | 66.7 |
| Louisville, Ky. | 1915–1917 | 3 | 3 | | 1 | |
| Lowell, Mass. | 1915–1917 | 3 | 2 | 0 | 0 | |
| Lynn, Mass. | 1916–1917 | 2 | 1 | | 0 | |
| Memphis, Tenn. | 1917 | 1 | 140 | 66 | 32 | 48.5 |
| Milwaukee, Wis. | | | | 1 | 1 | |
| Minneapolis, Minn. | | | | 1 | 1 | |
| Nashville, Tenn. | 1915–1917 | 3 | 318 | 54 | 29 | 53.7 |
| New Orleans, La. | 1915–1917 | 3 | 62 | 52 | 52 | |
| New York, N. Y. | 1915–1917 | 3 | 7 | 2 | 11 | |
| Oklahoma City, Okla. | | | | | 7 | |
| Omaha, Nebr. | | | | | 1 | |
| Paterson, N. J. | 1916–1917 | 2 | 1 | 0 | 0 | |
| Philadelphia, Pa. | 1915, 1917 | 2 | 3 | 3 | 3 | |
| Pittsburgh, Pa. | 1916–1917 | 2 | 1 | | | |
| Portland, Oreg. | | | | | 1 | |
| Providence, R. I. | 1916–1917 | 2 | 1 | 2 | 2 | |
| Richmond, Va. | 1915–1917 | 3 | 22 | 23 | 19 | 82.6 |
| San Antonio, Tex. | | | | | 22 | |
| San Francisco, Calif. | 1916–1917 | 2 | 1 | | 1 | |
| Schenectady, N. Y. | | | | | 1 | |
| Seattle, Wash. | 1915 | 1 | 1 | 0 | | |
| Springfield, Mass. | 1916–1917 | 2 | 1 | 0 | 0 | |
| Syracuse, N. Y. | | | | | 1 | |
| Washington, D. C. | 1915–1917 | 3 | 19 | 14 | 9 | 64.3 |
| Worcester, Mass. | 1916–1917 | 2 | 7 | 2 | 3 | |
| Youngstown, Ohio. | | | | 1 | | |

For Pneumonia (all forms) see page 1696.

### POLIOMYELITIS (INFANTILE PARALYSIS).

| | | | | | | |
|---|---|---|---|---|---|---|
| Albany, N. Y. | 1913, 1916 1917 | 3 | 11 | 0 | 0 | |
| Atlanta, Ga. | 1916, 1917 | 2 | 2 | 0 | 0 | |
| Baltimore, Md. | 1913–1917 | 5 | 47 | 38 | 5 | 13.2 |
| Birmingham, Ala. | 1913–1917 | 5 | 6 | 2 | 3 | |
| Boston, Mass. | 1913–1917 | 5 | 152 | 17 | 9 | 52.9 |
| Bridgeport, Conn. | 1913 1915–1917 | 4 | 20 | 1 | 0 | |
| Buffalo, N. Y. | 1913–1917 | 5 | 16 | 7 | 1 | 14.3 |
| Cambridge, Mass. | 1913, 1917 | 2 | 4 | 6 | 2 | 33.3 |
| Camden N. J. | 1914, 1916 1917 | 3 | 23 | 0 | 0 | |
| Chicago, Ill. | 1913–1917 | 5 | 184 | 96 | 25 | 26.0 |

## REPORTED PREVALENCE FOR 1918—AVERAGES FOR PREVIOUS YEARS—Continued.

### POLIOMYELITIS (INFANTILE PARALYSIS)—Continued.

| City. | Average. | | | 1918 | | |
|---|---|---|---|---|---|---|
| | Years. | Number of years. | Cases reported. | Cases reported. | Deaths registered. | Fatalities per 100 cases. |
| Cincinnati, Ohio | 1913, 1915-1917 | 4 | 18 | 23 | 2 | 8.7 |
| Cleveland, Ohio | 1913-1917 | 5 | 52 | 23 | 2 | 8.7 |
| Columbus, Ohio | 1913-1917 | 5 | 5 | 10 | 5 | 50.0 |
| Dallas, Tex | 1915-1917 | 3 | 2 | 10 | 2 | 20.0 |
| Dayton, Ohio | 1914-1917 | 4 | 7 | 2 | 0 | ..... |
| Denver, Colo | 1914-1917 | 4 | 3 | ..... | 2 | ..... |
| Des Moines, Iowa | 1916, 1917 | 2 | 7 | 2 | 0 | ..... |
| Detroit, Mich | 1915-1917 | 3 | 28 | 17 | 8 | 47.1 |
| Fall River, Mass | 1914-1917 | 4 | 9 | 2 | 0 | ..... |
| Fort Worth, Tex | 1915, 1916 | 2 | 1 | ..... | ..... | ..... |
| Grand Rapids, Mich | 1914, 1916, 1917 | 3 | 13 | 5 | 3 | 60.0 |
| Hartford, Conn | 1913, 1915-1917 | 4 | 19 | 17 | 2 | 11.8 |
| Houston, Tex | 1916, 1917 | 2 | 3 | 1 | 0 | ..... |
| Indianapolis, Ind | 1913, 1915-1917 | 4 | 9 | 3 | ..... | ..... |
| Jersey City, N. J | 1913-1917 | 5 | 41 | 1 | ..... | ..... |
| Kansas City, Kans | 1917 | 1 | 9 | 2 | 2 | ..... |
| Kansas City, Mo | 1915-1917 | 3 | 12 | 3 | ..... | ..... |
| Lawrence, Mass | 1913-1917 | 5 | 6 | ..... | ..... | ..... |
| Los Angeles, Calif | 1913-1917 | 5 | 13 | 9 | 0 | ..... |
| Louisville, Ky | 1913, 1914, 1916, 1917 | 4 | 6 | 3 | 0 | ..... |
| Lowell, Mass | 1914-1917 | 4 | 11 | 7 | 5 | 71.4 |
| Lynn, Mass | 1913-1917 | 5 | 12 | ..... | 0 | ..... |
| Milwaukee, Wis | 1916-1917 | 2 | 13 | 94 | 24 | 25.5 |
| Minneapolis, Minn | 1915-1917 | 3 | 42 | 5 | 2 | 40.0 |
| Nashville, Tenn | 1913, 1915, 1916 | 3 | 3 | ..... | 1 | ..... |
| Newark, N. J | 1913-1917 | 5 | 300 | 19 | 6 | 31.6 |
| New Bedford, Mass | 1914-1917 | 4 | 7 | 11 | 0 | ..... |
| New Haven, Conn | 1914, 1916, 1917 | 3 | 33 | 6 | 1 | 16.7 |
| New Orleans, La | 1913-1917 | 5 | 10 | 19 | 0 | ..... |
| New York, N. Y | 1913-1917 | 5 | 1,939 | 134 | 29 | 21.6 |
| Oakland, Calif | 1914-1917 | 4 | 2 | 2 | ..... | ..... |
| Oklahoma City, Okla | 1916-1917 | 2 | 2 | ..... | 1 | ..... |
| Omaha, Nebr | 1914, 1916, 1917 | 3 | 10 | 0 | 0 | ..... |
| Paterson, N. J | 1913-1917 | 5 | 21 | 0 | 0 | ..... |
| Philadelphia, Pa | 1913-1917 | 5 | 216 | 16 | 6 | 37.5 |
| Pittsburgh, Pa | 1913-1917 | 5 | 20 | 42 | 8 | 19.0 |
| Portland, Oreg | 1916-1917 | 2 | 15 | 2 | ..... | ..... |
| Providence, R. I | 1913-1917 | 5 | 36 | 9 | 2 | 22.2 |
| Reading, Pa | 1914-1917 | 4 | 2 | 1 | 0 | ..... |
| Richmond, Va | 1916-1917 | 2 | 12 | 5 | 1 | 20.0 |
| Rochester, N. Y | 1913, 1914, 1916, 1917 | 4 | 4 | 9 | 3 | 33.3 |
| Salt Lake City, Utah | 1913, 1915, 1916 | 3 | 6 | 5 | ..... | ..... |
| San Antonio, Tex | 1916-1917 | 2 | 4 | 2 | 0 | ..... |
| San Francisco, Calif | 1913-1917 | 5 | 14 | 16 | 3 | 18.7 |
| Schenectady, N. Y | 1913-1917 | 5 | 4 | ..... | 1 | ..... |
| Scranton, Pa | 1914, 1916, 1917 | 3 | 6 | 4 | ..... | ..... |
| Seattle, Wash | 1913, 1915-1917 | 4 | 8 | 1 | 0 | ..... |
| Spokane, Wash | 1913, 1916, 1917 | 3 | 2 | 1 | 1 | ..... |
| Springfield, Mass | 1913-1917 | 5 | 25 | 4 | 0 | ..... |

## REPORTED PREVALENCE FOR 1918—AVERAGES FOR PREVIOUS YEARS—Continued.

### POLIOMYELITIS (INFANTILE PARALYSIS)—Continued.

| City. | Average. | | | 1918 | | |
|---|---|---|---|---|---|---|
| | Years. | Number of years. | Cases reported. | Cases reported. | Deaths registered. | Fatalities per 100 cases. |
| St. Louis, Mo. | 1913–1917 | 5 | 12 | 26 | 6 | 23.1 |
| St. Paul, Minn. | 1913–1917 | 5 | 18 | 4 | 1 | 25.0 |
| Syracuse, N. Y. | 1913, 1914, 1916, 1917 | 4 | 63 | 1 | 1 | ..... |
| Tacoma, Wash. | 1914, 1916, 1917 | 3 | 1 | 1 | ..... | ..... |
| Toledo, Ohio. | 1915–1917 | 3 | 40 | 17 | 3 | 17.6 |
| Trenton, N. J. | 1914–1917 | 4 | 43 | 0 | 0 | ..... |
| Washington, D. C. | 1913–1917 | 5 | 13 | 2 | 0 | ..... |
| Worcester, Mass. | 1913, 1914, 1916, 1917 | 4 | 15 | 1 | ..... | ..... |
| Yonkers, N. Y. | 1913, 1914, 1916 | 3 | 47 | ..... | ..... | ..... |
| Youngstown, Ohio. | 1916–1917 | 2 | 4 | 4 | ..... | ..... |

### RABIES (IN MAN).

| City. | Cases reported. | Deaths registered. | City. | Cases reported. | Deaths registered. |
|---|---|---|---|---|---|
| Birmingham, Ala. | 1 | 1 | New Orleans, La. | ..... | 3 |
| Dallas, Tex. | ..... | 2 | Pittsburgh, Pa. | 3 | 3 |
| Denver, Colo. | 1 | 1 | Spokane, Wash. | 1 | 1 |
| Detroit, Mich. | ..... | 1 | St. Louis, Mo. | ..... | 5 |
| Louisville, Ky. | 1 | 1 | Toledo, Ohio | ..... | 3 |
| Milwaukee, Wis. | 1 | 1 | Youngstown, Ohio. | 1 | 1 |

### RABIES (IN ANIMALS).

| City. | Cases reported. | City. | Cases reported. |
|---|---|---|---|
| Boston, Mass. | 10 | Memphis, Tenn. | 53 |
| Buffalo, N. Y. | 2 | Milwaukee, Wis. | 28 |
| Cincinnati, Ohio | 3 | Minneapolis, Minn. | 7 |
| Cleveland, Ohio. | 117 | Newark, N. J. | 15 |
| Columbus, Ohio. | 8 | New York, N. Y. | 19 |
| Dayton, Ohio | 6 | Rochester, N. Y. | 78 |
| Denver, Colo. | 5 | Schenectady, N. Y. | 7 |
| Detroit, Mich. | 23 | St. Paul, Minn. | 5 |
| Kansas City, Mo. | 37 | Toledo, Ohio. | 16 |
| Los Angeles, Calif. | 1 | Washington, D. C. | 20 |
| Louisville, Ky. | 8 | | |

### SCARLET FEVER.

| City. | Average. | | | 1918. | | |
|---|---|---|---|---|---|---|
| | Years. | Number of years. | Cases reported. | Cases reported. | Deaths registered. | Fatalities per 100 cases. |
| Albany, N. Y. | 1913–1917 | 5 | 181 | 26 | 1 | 3.8 |
| Atlanta, Ga. | 1916–1917 | 2 | 159 | 183 | ..... | ..... |
| Baltimore, Md. | 1913–1917 | 5 | 944 | 366 | 8 | 2.2 |
| Birmingham, Ala. | 1913–1917 | 5 | 189 | 226 | 3 | 1.3 |
| Boston, Mass. | 1913–1917 | 5 | 2,205 | 1,126 | 24 | 2.1 |

## REPORTED PREVALENCE FOR 1918—AVERAGES FOR PREVIOUS YEARS—Continued.

### SCARLET FEVER—Continued.

| City. | Average. | | | 1918. | | |
|---|---|---|---|---|---|---|
| | Years. | Number of years. | Cases reported. | Cases reported. | Deaths registered. | Fatalities per 100 cases. |
| Bridgeport, Conn. | 1913-1917 | 5 | 204 | 110 | 1 | .9 |
| Buffalo, N. Y. | 1913-1917 | 5 | 608 | 632 | 18 | 2.8 |
| Cambridge, Mass. | 1913, 1917 | 2 | 145 | 59 | ..... | ..... |
| Camden, N. J. | 1914-1917 | 4 | 67 | 109 | 1 | .9 |
| Chicago, Ill. | 1913-1917 | 5 | 7,922 | 1,809 | 48 | 2.7 |
| Cincinnati, Ohio. | 1913-1917 | 5 | 432 | 279 | 3 | 1.1 |
| Cleveland, Ohio. | 1913-1917 | 5 | 807 | 408 | 11 | 2.7 |
| Columbus, Ohio. | 1913-1917 | 5 | 336 | 724 | 4 | .6 |
| Dallas, Tex. | 1915-1917 | 3 | 121 | 47 | 1 | 2.1 |
| Dayton, Ohio. | 1913-1917 | 5 | 534 | 150 | 3 | 2.0 |
| Denver, Colo. | 1913-1917 | 5 | 504 | 777 | 7 | .9 |
| Des Moines, Iowa. | 1916-1917 | 2 | 132 | 424 | 8 | 1.9 |
| Detroit, Mich. | 1913-1917 | 5 | 2,084 | 1,599 | 45 | 2.8 |
| Fall River, Mass. | 1913-1917 | 5 | 221 | 119 | 0 | ..... |
| Fort Worth, Tex. | 1915-1917 | 3 | 88 | 71 | ..... | ..... |
| Grand Rapids, Mich. | 1913-1917 | 5 | 347 | 284 | 2 | .7 |
| Hartford, Conn. | 1914-1917 | 4 | 148 | 160 | 2 | 1.3 |
| Houston, Tex. | 1916-1917 | 2 | 50 | 23 | 0 | ..... |
| Indianapolis, Ind. | 1913-1917 | 5 | 553 | 913 | 19 | 2.1 |
| Jersey City, N. J. | 1913-1917 | 5 | 676 | 388 | 10 | 2.6 |
| Kansas City, Kans. | 1914, 1917 | 2 | 261 | 179 | 5 | 2.8 |
| Kansas City, Mo. | 1913-1917 | 5 | 630 | 434 | ..... | ..... |
| Lawrence, Mass. | 1913-1917 | 5 | 102 | 14 | ..... | ..... |
| Los Angeles, Calif. | 1913-1917 | 5 | 487 | 362 | 4 | 1.1 |
| Louisville, Ky. | 1913-1917 | 5 | 233 | 73 | 1 | 1.4 |
| Lowell, Mass. | 1913-1917 | 5 | 114 | 99 | 4 | 4.0 |
| Lynn, Mass. | 1913-1917 | 5 | 247 | 110 | 2 | 1.8 |
| Memphis, Tenn. | 1917 | 1 | 177 | 147 | 2 | 1.4 |
| Milwaukee, Wis. | 1913-1914, 1916-1917 | 4 | 1,711 | 1,327 | 51 | 3.8 |
| Minneapolis, Minn. | 1915-1917 | 3 | 600 | 669 | 33 | 4.9 |
| Nashville, Tenn. | 1914-1917 | 4 | 102 | 96 | 3 | 3.1 |
| Newark, N. J. | 1913-1917 | 5 | 979 | 515 | 11 | 2.1 |
| New Bedford, Mass. | 1914-1917 | 4 | 191 | 56 | 2 | 3.6 |
| New Haven, Conn. | 1913-1917 | 5 | 222 | 55 | 3 | 5.5 |
| New Orleans, La. | 1913-1917 | 5 | 111 | 58 | 0 | ..... |
| New York, N. Y. | 1913-1917 | 5 | 8,755 | 4,460 | 177 | 4.0 |
| Oakland, Calif. | 1914-1917 | 4 | 218 | 182 | 2 | 1.1 |
| Oklahoma City, Okla. | 1913-1917 | 5 | 90 | 38 | 1 | 2.6 |
| Omaha, Nebr. | 1913-1914, 1916-1917 | 4 | 631 | 412 | 6 | 1.5 |
| Paterson, N. J. | 1913-1917 | 5 | 137 | 67 | 1 | 1.5 |
| Philadelphia, Pa. | 1913-1917 | 5 | 1,910 | 1,384 | 43 | 3.1 |
| Pittsburgh, Pa. | 1913-1917 | 5 | 1,832 | 450 | 9 | 2.0 |
| Portland, Oreg. | 1916-1917 | 2 | 472 | 254 | 5 | 2.0 |
| Providence, R. I. | 1913-1917 | 5 | 641 | 367 | 18 | 4.9 |
| Reading, Pa. | 1914-1917 | 4 | 229 | 84 | 1 | 1.2 |
| Richmond, Va. | 1914-1917 | 4 | 202 | 171 | 0 | ..... |
| Rochester, N. Y. | 1913-1914, 1916-1917 | 4 | 666 | 518 | 9 | 1.7 |
| Salt Lake City, Utah. | 1913-1917 | 5 | 300 | 472 | 17 | 3.6 |
| San Antonio, Tex. | 1913, 1915-1917 | 4 | 53 | 37 | 1 | 2.7 |
| San Francisco, Calif. | 1913-1917 | 5 | 647 | 435 | 8 | 1.8 |
| Schenectady, N. Y. | 1913-1917 | 5 | 221 | 43 | 1 | 2.3 |
| Scranton, Pa. | 1914-1917 | 4 | 209 | 146 | 3 | 2.1 |
| Seattle, Wash. | 1913-1917 | 5 | 174 | 637 | 14 | 2.2 |
| Spokane, Wash. | 1915, 1916, 1917 | 3 | 76 | 147 | 2 | 1.4 |
| Springfield, Mass. | 1913-1917 | 5 | 198 | 139 | 3 | 2.2 |
| St. Louis, Mo. | 1913-1917 | 5 | 1,439 | 933 | 17 | 1.8 |
| St. Paul, Minn. | 1913-1917 | 5 | 769 | 785 | 39 | 4.9 |
| Syracuse, N. Y. | 1913-1917 | 5 | 333 | 452 | 2 | .4 |
| Tacoma, Wash. | 1913-1914, 1916-1917 | 4 | 73 | 799 | 3 | .4 |
| Toledo, Ohio. | 1913-1917 | 5 | 629 | 298 | 16 | 5.4 |

## REPORTED PREVALENCE FOR 1918—AVERAGES FOR PREVIOUS YEARS—Continued.

### SCARLET FEVER—Continued.

| City. | Average. | | | 1918 | | |
|---|---|---|---|---|---|---|
| | Years. | Number of years. | Cases reported. | Cases reported. | Deaths registered. | Fatalities per 100 cases. |
| Trenton, N. J. | 1914–1917 | 4 | 160 | 29 | 0 | ..... |
| Washington, D. C. | 1913–1917 | 5 | 555 | 883 | 16 | 1.8 |
| Worcester, Mass. | 1913–1914, 1916–1917 | 4 | 290 | 168 | 2 | 1.2 |
| Yonkers, N. Y. | 1913–1914, 1916–1917 | 4 | 240 | 100 | 8 | 8.0 |
| Youngstown, Ohio | 1916–1917 | 2 | 148 | 77 | ..... | ..... |

### SMALLPOX.

| | | | | | | |
|---|---|---|---|---|---|---|
| Albany, N. Y. | 1913–1914, 1917 | 3 | 10 | 0 | 0 | ..... |
| Altanta, Ga. | 1917 | 1 | 24 | 67 | ..... | ..... |
| Baltimore, Md. | 1913–1915, 1917 | 4 | 103 | 46 | 0 | ..... |
| Birmingham, Ala. | 1913–1917 | 5 | 124 | 754 | 2 | 0.3 |
| Boston, Mass. | 1913–1917 | 5 | 2 | 6 | ..... | ..... |
| Bridgeport, Conn. | 1914, 1917 | 2 | 1 | ..... | ..... | ..... |
| Buffalo, N. Y. | 1913–1917 | 5 | 13 | 71 | ..... | ..... |
| Camden, N. J. | 1915–1916 | 2 | 4 | 0 | 0 | ..... |
| Chicago, Ill. | 1913–1917 | 5 | 116 | 266 | 4 | 1.5 |
| Cincinnati, Ohio | 1914–1917 | 4 | 47 | 323 | 0 | ..... |
| Cleveland, Ohio | 1913–1917 | 5 | 191 | 1,120 | 0 | ..... |
| Columbus, Ohio | 1913–1917 | 5 | 78 | 212 | 1 | .5 |
| Dallas, Tex. | 1915–1917 | 3 | 109 | 417 | 0 | ..... |
| Dayton, Ohio | 1913–1915, 1917 | 4 | 32 | 138 | 0 | ..... |
| Denver, Colo. | 1913–1917 | 5 | 88 | 828 | 0 | ..... |
| Des Moines, Iowa | 1916–1917 | 2 | 101 | 545 | 0 | ..... |
| Detroit, Mich. | 1913–1917 | 5 | 411 | 893 | 6 | .7 |
| Fort Worth, Tex. | 1915–1917 | 3 | 127 | 515 | ..... | ..... |
| Grand Rapids, Mich. | 1914–1917 | 4 | 56 | 217 | 0 | ..... |
| Hartford, Conn. | 1914, 1917 | 2 | 10 | 36 | ..... | ..... |
| Houston, Tex. | 1916, 1917 | 2 | 32 | 65 | 2 | 3.1 |
| Indianapolis, Ind. | 1913–1917 | 5 | 262 | 1,202 | 4 | .3 |
| Jersey City, N. J. | 1914–1917 | 4 | 1 | 1 | ..... | ..... |
| Kansas City, Kans. | 1914, 1917 | 2 | 371 | 1,119 | 2 | .2 |
| Kansas City, Mo. | 1913–1917 | 5 | 439 | 1,933 | ..... | ..... |
| Los Angeles, Calif. | 1913–1917 | 5 | 42 | 114 | 0 | ..... |
| Louisville, Ky. | 1913–1917 | 5 | 187 | 73 | 0 | ..... |
| Lowell, Mass. | 1913, 1916, 1917 | 3 | 14 | 2 | 0 | ..... |
| Lynn, Mass. | 1913, 1916, 1917 | 3 | 1 | 1 | 0 | ..... |
| Memphis Tenn. | 1917 | 1 | 361 | 327 | ..... | ..... |
| Milwaukee, Wis. | 1913, 1914, 1916, 1917 | 4 | 437 | 206 | 1 | 5 |
| Minneapolis, Minn. | 1915–1917 | 3 | 463 | 523 | 3 | .6 |
| Nashville, Tenn. | 1913–1917 | 5 | 100 | 110 | ..... | ..... |
| Newark, N. J. | 1916, 1917 | 2 | 1 | 2 | 0 | ..... |
| New Bedford, Mass. | 1915, 1917 | 2 | 10 | 0 | 0 | ..... |
| New Orleans, La. | 1913–1917 | 5 | 112 | 192 | 0 | ..... |
| New York, N. Y. | 1913–1917 | 5 | 13 | 21 | 0 | ..... |
| Oakland, Calif. | 1914–1917 | 4 | 11 | 23 | ..... | ..... |
| Oklahoma City, Okla. | 1913–1917 | 5 | 165 | 591 | 2 | .3 |
| Omaha, Nebr. | 1913, 1914, 1916, 1917 | 4 | 303 | 1,009 | 0 | ..... |
| Paterson, N. J. | 1914, 1917 | 2 | 0 | 1 | 0 | ..... |
| Philadelphia, Pa. | 1913, 1914, 1916, 1917 | 4 | 12 | 33 | 0 | ..... |
| Pittsburgh, Pa. | 1913–1917 | 5 | 12 | 48 | ..... | ..... |
| Portland, Oreg. | 1916, 1917 | 2 | 57 | 137 | ..... | ..... |
| Providence, R. I. | 1913, 1914, 1916, 1917 | 4 | 3 | 0 | 0 | ..... |

## REPORTED PREVALENCE FOR 1918—AVERAGES FOR PREVIOUS YEARS—Continued.

### SMALLPOX—Continued.

| City. | Average. | | | 1918 | | |
|---|---|---|---|---|---|---|
| | Years. | Number of years. | Cases reported. | Cases reported. | Deaths registered. | Fatalities per 100 cases. |
| Reading, Pa. | 1914, 1916, 1917 | 3 | 4 | 0 | 0 | ..... |
| Richmond, Va. | 1914-1917 | 4 | 17 | 5 | 0 | ..... |
| Rochester, N. Y. | 1913, 1914, 1917 | 3 | 3 | 0 | 0 | ..... |
| Salt Lake City, Utah | 1913-1917 | 5 | 238 | 576 | 2 | .3 |
| San Antonio, Tex. | 1913, 1915-1917 | 4 | 132 | 17 | 0 | ..... |
| San Francisco, Calif. | 1913-1917 | 5 | 40 | 125 | 0 | ..... |
| Schenectady, N. Y. | 1913, 1917 | 2 | 2 | 1 | 0 | ..... |
| Scranton, Pa. | ..... | ..... | ..... | 2 | ..... | ..... |
| Seattle, Wash. | 1913-1917 | 5 | 63 | 270 | 1 | .4 |
| Spokane, Wash. | 1913, 1916, 1917 | 3 | 229 | 364 | 0 | ..... |
| St. Louis, Mo. | 1913-1917 | 5 | 158 | 502 | ..... | ..... |
| St. Paul, Minn. | 1913-1917 | 5 | 136 | 382 | 0 | ..... |
| Syracuse, N. Y. | 1913, 1915-1917 | 4 | 3 | 2 | 0 | ..... |
| Tacoma, Wash. | 1913, 1914, 1916, 1917 | 4 | 36 | 59 | ..... | ..... |
| Toledo, Ohio. | 1913-1917 | 5 | 248 | 210 | 1 | .5 |
| Washington, D. C. | 1913-1917 | 5 | 64 | 48 | 0 | ..... |
| Worcester, Mass. | 1914, 1917 | 2 | 20 | ..... | ..... | ..... |
| Yonkers, N. Y. | 1914 | 1 | 1 | ..... | ..... | ..... |
| Youngstown, Ohio. | 1916, 1917 | 2 | 200 | 115 | ..... | ..... |

### SYPHILIS.

| City. | Cases reported. | Deaths registered. | Number of cases reported for each death registered. | City. | Cases reported. | Deaths registered. | Number of cases reported for each death registered. |
|---|---|---|---|---|---|---|---|
| Albany, N. Y. | ..... | 11 | ..... | Nashville, Tenn. | 152 | 19 | 8.0 |
| Atlanta, Ga. | 67 | ..... | ..... | New Bedford, Mass. | ..... | 5 | ..... |
| Baltimore, Md. | 235 | 126 | 1.9 | New Haven, Conn. | 100 | 0 | ..... |
| Birmingham, Ala. | 96 | 96 | 1.0 | New Orleans, La. | 130 | 94 | 1.4 |
| Boston, Mass. | 93 | 87 | 1.1 | New York, N. Y. | 17,320 | 584 | 29.7 |
| Buffalo, N. Y. | ..... | 67 | ..... | Oakland, Calif. | 70 | 13 | 5.4 |
| Cambridge, Mass. | ..... | 3 | ..... | Omaha, Nebr. | ..... | 12 | ..... |
| Camden, N. J. | 2 | 0 | ..... | Philadelphia, Pa. | 1,033 | 285 | 3.6 |
| Chicago, Ill. | 2,442 | 191 | 12.8 | Pittsburgh, Pa. | ..... | 60 | ..... |
| Cincinnati, Ohio. | 40 | ..... | ..... | Portland, Oreg. | 283 | 13 | 21.8 |
| Cleveland, Ohio. | 305 | 101 | 3.0 | Providence, R. I. | ..... | 30 | ..... |
| Columbus, Ohio. | 7 | 16 | ..... | Reading, Pa. | ..... | 6 | ..... |
| Dayton, Ohio. | ..... | 17 | ..... | Richmond, Va. | ..... | 43 | ..... |
| Denver, Colo. | 502 | 17 | 29.5 | Rochester, N. Y. | 80 | 17 | 4.7 |
| Detroit, Mich. | 737 | 94 | 7.8 | Salt Lake City, Utah. | ..... | 6 | ..... |
| Fall River, Mass. | 1 | 7 | ..... | San Antonio, Tex. | ..... | 9 | ..... |
| Fort Worth, Tex. | ..... | 1 | ..... | San Francisco, Calif. | 733 | 97 | 7.6 |
| Hartford, Conn. | 66 | 3 | 22.0 | Schenectady, N. Y. | ..... | 6 | ..... |
| Houston, Tex. | 363 | 15 | 24.2 | Scranton, Pa. | ..... | 3 | ..... |
| Jersey City, N. J. | 1 | ..... | ..... | Seattle, Wash. | 623 | 34 | 18.3 |
| Kansas City, Kans. | 35 | ..... | ..... | Spokane, Wash. | 87 | 11 | 7.9 |
| Los Angeles, Calif. | 796 | 52 | 15.3 | St. Paul, Minn. | ..... | 12 | ..... |
| Louisville, Ky. | ..... | 18 | ..... | Syracuse, N. Y. | ..... | 20 | ..... |
| Lowell, Mass. | 5 | 2 | 2.5 | Tacoma, Wash. | 95 | 3 | 31.6 |
| Lynn, Mass. | ..... | 4 | ..... | Toledo, Ohio. | 200 | 57 | 3.5 |
| Memphis, Tenn. | ..... | 25 | ..... | Trenton, N. J. | 4 | 0 | ..... |
| Milwaukee, Wis. | ..... | 12 | ..... | Worcester, Mass. | ..... | 20 | ..... |
| Minneapolis, Minn. | 835 | 63 | 13.3 | Youngstown, Ohio. | 12 | 20 | ..... |

## REPORTED PREVALENCE FOR 1918—AVERAGES FOR PREVIOUS YEARS—Continued.

### TUBERCULOSIS (PULMONARY).

| City. | Average. | | | 1918 | | |
|---|---|---|---|---|---|---|
| | Years. | Number of years. | Cases reported. | Cases reported. | Deaths registered. | Number of cases reported for each death registered. |
| Albany, N. Y. | 1916, 1917 | 2 | 445 | 354 | 217 | 1.6 |
| Atlanta, Ga. | | | | 199 | 239 | |
| Baltimore, Md. | 1916, 1917 | 2 | 1,920 | 2,036 | 1,273 | 1.6 |
| Birmingham, Ala. | 1916, 1917 | 2 | 561 | 448 | 304 | 1.5 |
| Boston, Mass. | 1916, 1917 | 2 | 2,645 | 2,779 | 1,186 | 2.3 |
| Bridgeport, Conn. | | | | 270 | 177 | 1.5 |
| Buffalo, N. Y. | 1916, 1917 | 2 | 1,303 | 1,295 | 713 | 1.8 |
| Cambridge, Mass. | 1917 | 1 | 274 | 219 | 220 | |
| Chicago, Ill. | | | | | 3,276 | |
| Cincinnati, Ohio | 916, 1917 | 2 | 1,397 | 1,110 | 855 | 1.3 |
| Cleveland, Ohio | 1916, 1917 | 2 | 1,795 | 1,606 | 1,020 | 1.6 |
| Columbus, Ohio | 1917 | 1 | 281 | 312 | 312 | |
| Dallas, Tex. | 1916, 1917 | 2 | 118 | | 167 | |
| Dayton, Ohio | 1916, 1917 | 2 | 190 | 187 | 176 | 1.1 |
| Denver, Colo. | | | | | 729 | |
| Des Moines, Iowa | | | | 2 | 93 | |
| Detroit, Mich. | | | | 1,922 | 941 | 2.0 |
| Fall River, Mass. | 1916, 1917 | 2 | 463 | 375 | 222 | 1.7 |
| Fort Worth, Tex. | 1917 | 1 | 84 | 110 | 110 | |
| Grand Rapids, Mich. | | | | 246 | 135 | 1.8 |
| Hartford, Conn. | 1916, 1917 | 2 | 261 | 253 | 123 | 2.1 |
| Houston, Tex. | | | | 159 | 200 | |
| Indianapolis, Ind. | 1916, 1917 | 2 | 783 | 654 | 440 | 1.5 |
| Jersey City, N. J. | | | | | 385 | |
| Kansas City, Kans. | 1917 | 1 | 123 | 122 | 93 | 1.3 |
| Lawrence, Mass. | 1916, 1917 | 2 | 192 | 199 | 158 | 1.3 |
| Louisville, Ky. | 1916 | 1 | 725 | 382 | 395 | |
| Lowell, Mass. | 1916, 1917 | 2 | 214 | 237 | 144 | 1.6 |
| Lynn, Mass. | 1916, 1917 | 2 | 175 | 162 | 97 | 1.7 |
| Memphis, Tenn. | | | | | 370 | |
| Milwaukee, Wis. | 1916 | 1 | 1,017 | 1,115 | 482 | 2.3 |
| Minneapolis, Minn. | | | | 1,084 | 415 | 2.6 |
| Nashville, Tenn. | 1916, 1917 | 2 | 246 | 196 | 227 | |
| Newark, N. J. | 1916, 1917 | 2 | 1,864 | 1,451 | 683 | 2.1 |
| New Bedford, Mass. | 1916, 1917 | 2 | 404 | 435 | 203 | 2.1 |
| New Haven, Conn. | 1916, 1917 | 2 | 289 | 418 | 175 | 2.4 |
| New Orleans, La. | 1916, 1917 | 2 | 1,642 | | 1,076 | |
| New York, N. Y. | 1916, 1917 | 2 | 18,395 | 14,439 | 8,779 | 1.6 |
| Oakland, Calif. | 1916, 1917 | 2 | 318 | 375 | 181 | 2.1 |
| Oklahoma, Okla. | 1916 | 1 | 11 | 49 | 95 | |
| Omaha, Nebr. | 1916 | 1 | 46 | | 168 | |
| Paterson, N. J. | 1917 | 1 | 1,203 | 431 | 188 | 2.3 |
| Philadelphia, Pa. | | | | | 3,257 | |
| Pittsburgh, Pa. | 1917 | 1 | 1,307 | 1,215 | 691 | 1.8 |
| Portland, Oreg. | 1916, 1917 | 2 | 281 | 488 | 185 | 2.6 |
| Providence, R. I. | 1916, 1917 | 2 | 152 | | 320 | |
| Reading, Pa. | 1916 | 1 | 187 | 94 | 111 | |
| Richmond, Va. | 1916, 1917 | 2 | 291 | | 285 | |
| Rochester, N. Y. | 1917 | 1 | 538 | | 242 | |
| Salt Lake City, Utah | 1916, 1917 | 2 | 7 | | 52 | |
| San Francisco, Calif. | 1916, 1917 | 2 | 1,470 | 1,727 | 820 | 2.1 |
| Schenectady, N. Y. | 1916 | 1 | 208 | 211 | 72 | 2.9 |
| Scranton, Pa. | 1917 | 1 | 149 | 145 | 110 | 1.3 |
| Seattle, Wash. | 1916, 1917 | 2 | 549 | 565 | 191 | 3.0 |
| Spokane, Wash. | 1916, 1917 | 2 | 97 | 115 | 64 | 1.8 |
| Springfield, Mass. | 1916, 1917 | 2 | 179 | 179 | 124 | 1.4 |
| St. Louis, Mo. | 1916, 1917 | 2 | 2,288 | 2,250 | 1,353 | 1.7 |
| St. Paul, Minn. | 1916, 1917 | 2 | 401 | | 239 | |

## REPORTED PREVALENCE FOR 1918—AVERAGES FOR PREVIOUS YEARS—Continued.

### TUBERCULOSIS (PULMONARY)—Continued.

| City. | Average. | | | 1918 | | |
|---|---|---|---|---|---|---|
| | Years. | Number of years. | Cases reported. | Cases reported. | Deaths registered. | Number of cases reported for each death registered. |
| Syracuse, N. Y. | 1917 | 1 | 261 | 262 | 134 | 2.0 |
| Tacoma, Wash. | 1916 | 1 | 55 | ..... | ..... | ..... |
| Toledo, Ohio. | ..... | ..... | ..... | ..... | 350 | ..... |
| Trenton, N. J. | 1916, 1917 | 2 | 337 | ..... | 259 | ..... |
| Washington, D. C. | ..... | ..... | ..... | 1,131 | 647 | 1.7 |
| Worcester, Mass. | 1916, 1917 | 2 | 372 | 336 | 183 | 1.8 |
| Yonkers, N. Y. | 1916, 1917 | 2 | 210 | 179 | 126 | 1.4 |
| Youngstown, Ohio. | 1916, 1917 | 2 | 152 | 137 | 104 | 1.3 |

### TUBERCULOSIS (ALL FORMS).

| | | | | | | |
|---|---|---|---|---|---|---|
| Albany, N. Y. | ..... | ..... | ..... | ..... | 241 | ..... |
| Atlanta, Ga. | 1917 | 1 | 137 | ..... | ..... | ..... |
| Baltimore, Md. | 1917 | 1 | 2,028 | 2,056 | 1,493 | 1.4 |
| Birmingham, Ala. | ..... | ..... | ..... | ..... | 362 | ..... |
| Boston, Mass. | 1916 | 1 | 2,734 | 3,019 | 1,367 | 2.2 |
| Bridgeport, Conn. | 1916, 1917 | 2 | 248 | ..... | 210 | ..... |
| Buffalo, N. Y. | 1916, 1917 | 2 | 1,501 | 1,505 | 816 | 1.8 |
| Cambridge, Mass. | 1917 | 1 | 304 | 243 | 246 | ..... |
| Camden, N. J. | 1916, 1917 | 2 | 224 | 253 | 24 | 10.5 |
| Chicago, Ill. | 1916, 1917 | 2 | 13,462 | 16,567 | 3,827 | 4.3 |
| Cincinnati, Ohio. | 1916, 1917 | 2 | 1,487 | 1,280 | 940 | 1.4 |
| Cleveland, Ohio. | 1916, 1917 | 2 | 1,862 | 1,639 | 1,150 | 1.4 |
| Columbus, Ohio. | 1916, 1917 | 2 | 351 | 402 | 402 | ..... |
| Dallas, Tex. | 1917 | 1 | 93 | 315 | 197 | 1.6 |
| Dayton, Ohio. | ..... | ..... | ..... | ..... | 212 | ..... |
| Denver, Colo. | ..... | ..... | ..... | ..... | 798 | ..... |
| Des Moines, Iowa. | ..... | ..... | ..... | ..... | 107 | ..... |
| Detroit, Mich. | 1916, 1917 | 2 | 1,653 | 1,982 | 1,110 | 1.8 |
| Fall River, Mass. | 1916, 1917 | 2 | 493 | 415 | 248 | 1.7 |
| Fort Worth, Tex. | 1916 | 1 | 19 | ..... | ..... | ..... |
| Grand Rapids, Mich. | 1916, 1917 | 2 | 304 | ..... | ..... | ..... |
| Hartford, Conn. | ..... | ..... | ..... | ..... | 156 | ..... |
| Houston, Tex. | 1916, 1917 | 2 | 204 | ..... | ..... | ..... |
| Jersey City, N. J. | 1916, 1917 | 2 | 1,045 | 839 | 435 | 1.9 |
| Kansas City, Mo. | 1916, 1917 | 2 | 253 | 79 | ..... | ..... |
| Lawrence, Mass. | 1916, 1917 | 2 | 217 | 242 | 166 | 1.5 |
| Los Angeles, Calif. | 1916 | 1 | 2,697 | 2,198 | 1,146 | 1.9 |
| Louisville, Ky. | 1916, 1917 | 2 | 751 | 540 | 443 | 1.2 |
| Lowell, Mass. | 1916, 1917 | 2 | 233 | 256 | 182 | 1.4 |
| Lynn, Mass. | 1916, 1917 | 2 | 196 | 182 | 118 | 1.5 |
| Memphis, Tenn. | 1917 | 1 | 770 | 778 | 406 | 1.9 |
| Milwaukee, Wis. | 1917 | 1 | 962 | ..... | ..... | ..... |
| Minneapolis, Minn. | 1916, 1917 | 2 | 1,148 | 1,174 | 478 | 2.5 |
| Nashville, Tenn. | ..... | ..... | ..... | ..... | 283 | ..... |
| Newark, N. J. | 1916, 1917 | 2 | 2,258 | 1,962 | 798 | 2.5 |
| New Bedford, Mass. | 1916, 1917 | 2 | 436 | 486 | 236 | 2.1 |
| New Haven, Conn. | ..... | ..... | ..... | ..... | 220 | ..... |
| New Orleans, La. | ..... | ..... | ..... | 1,669 | 1,210 | 1.4 |
| New York, N. Y. | ..... | ..... | ..... | ..... | 10,099 | ..... |
| Oakland, Calif. | 1916 | 1 | 364 | ..... | 215 | ..... |
| Oklahoma City, Okla. | 1917 | 1 | 11 | ..... | ..... | ..... |
| Omaha, Nebr. | 1917 | 1 | 68 | ..... | 194 | ..... |
| Paterson, N. J. | 1916 | 1 | 447 | ..... | ..... | ..... |
| Philadelphia, Pa. | 1916, 1917 | 2 | 5,758 | 5,555 | 3,595 | 1.5 |
| Pittsburgh, Pa. | 1916 | 1 | 1,267 | ..... | 830 | ..... |

## REPORTED PREVALENCE FOR 1918—AVERAGES FOR PREVIOUS YEARS—Continued.

### TUBERCULOSIS (ALL FORMS)—Continued.

| City. | Average. | | | 1918 | | |
|---|---|---|---|---|---|---|
| | Years. | Number of years. | Cases reported. | Cases reported. | Deaths registered. | Number of cases reported for each death registered. |
| Portland, Oreg. | 1916 | 1 | 271 | ..... | 248 | ..... |
| Providence, R. I. | 1916 | 1 | 14 | 533 | 425 | 1.3 |
| Reading, Pa. | 1917 | 1 | 157 | ..... | 113 | ..... |
| Richmond, Va. | ..... | ..... | ..... | 618 | 339 | 1.8 |
| Rochester, N. Y. | 1916, 1917 | 2 | 485 | 581 | 278 | 2.1 |
| Salt Lake City, Utah | 1917 | 1 | 5 | ..... | 64 | ..... |
| San Antonio, Tex | 1916, 1917 | 2 | 521 | 277 | 534 | ..... |
| San Francisco, Calif. | ..... | ..... | ..... | ..... | 926 | ..... |
| Schenectady, N. Y. | 1916, 1917 | 2 | 213 | 220 | 85 | 2.6 |
| Scranton, Pa. | 1916 | 1 | 158 | ..... | 146 | ..... |
| Seattle, Wash. | 1917 | 1 | 620 | ..... | ..... | ..... |
| Spokane, Wash. | 1916, 1917 | 2 | 120 | 132 | 80 | 1.7 |
| Springfield, Mass. | 1916, 1917 | 2 | 212 | 218 | 152 | 1.4 |
| St. Paul, Minn. | 1916, 1917 | 2 | 486 | 464 | 316 | 1.5 |
| Syracuse, N. Y. | 1916 | 1 | 201 | ..... | 171 | ..... |
| Tacoma, Wash. | 1917 | 1 | 83 | ..... | 68 | ..... |
| Toledo, Ohio. | 1916, 1917 | 2 | 426 | 510 | 392 | 1.3 |
| Trenton, N. J. | 1917 | 1 | 382 | ..... | 280 | ..... |
| Washington, D. C. | 1916, 1917 | 2 | 1,033 | ..... | 739 | ..... |
| Worcester, Mass. | ..... | ..... | ..... | ..... | 244 | ..... |
| Yonkers, N. Y. | 1916, 1917 | 2 | 223 | 199 | 145 | 1.4 |
| Youngstown, Ohio. | 1916, 1917 | 2 | 159 | 150 | 144 | ..... |

### TYPHOID FEVER.

| City. | Average. | | | 1918 | | |
|---|---|---|---|---|---|---|
| | Years. | Number of years. | Cases reported. | Cases reported. | Deaths registered. | Fatalities per 100 cases. |
| Albany, N. Y. | 1913-1917 | 5 | 136 | 86 | 12 | 14.0 |
| Atlanta, Ga. | 1916-1917 | 2 | 134 | 89 | 29 | 32.6 |
| Baltimore, Md. | 1913-1917 | 5 | 835 | 303 | 73 | 24.1 |
| Birmingham, Ala. | 1913-1917 | 5 | 579 | 304 | 64 | 21.1 |
| Boston, Mass. | 1913-1917 | 5 | 347 | 110 | 20 | 18.2 |
| Bridgeport, Conn. | 1913-1917 | 5 | 33 | 22 | 5 | 22.7 |
| Buffalo, N. Y. | 1913-1917 | 5 | 284 | 87 | 37 | 42.5 |
| Cambridge, Mass. | 1913, 1917 | 2 | 69 | 23 | 3 | 13.0 |
| Camden, N. J. | 1914-1917 | 4 | 63 | 42 | 4 | 9.5 |
| Chicago, Ill. | 1913-1917 | 5 | 1,019 | 270 | 38 | 14.1 |
| Cincinnati, Ohio. | 1913-1917 | 5 | 148 | 184 | 20 | 10.9 |
| Cleveland, Ohio. | 1913-1917 | 5 | 288 | 143 | 37 | 25.9 |
| Columbus, Ohio. | 1913-1917 | 5 | 144 | 41 | 20 | 48.8 |
| Dallas, Tex. | 1915-1917 | 3 | 141 | 25 | 17 | 68.0 |
| Dayton, Ohio. | 1913-1917 | 5 | 111 | 30 | 9 | 30.0 |
| Denver, Colo. | 1913-1917 | 5 | 147 | 130 | 24 | 18.5 |
| Des Moines, Iowa | ..... | ..... | ..... | 45 | 12 | 26.7 |
| Detroit, Mich. | 1914-1917 | 4 | 465 | 255 | 67 | 26.3 |
| Fall River, Mass. | 1913-1917 | 5 | 185 | 159 | 17 | 10.7 |
| Fort Worth, Tex. | 1916-1917 | 2 | 106 | ..... | ..... | ..... |
| Grand Rapids, Mich. | 1913-1917 | 5 | 139 | 50 | 9 | 18.0 |
| Hartford, Conn. | 1914-1917 | 4 | 105 | 37 | 8 | 21.6 |
| Houston, Tex. | 1916-1917 | 2 | 75 | 74 | 11 | 14.9 |
| Indianapolis, Ind. | 1913-1917 | 5 | 377 | 86 | 19 | 22.1 |
| Jersey City, N. J. | 1913-1917 | 5 | 64 | 20 | 13 | 65.0 |

## REPORTED PREVALENCE FOR 1918—AVERAGES FOR PREVIOUS YEARS—Continued.

### TYPHOID FEVER—Continued.

| City. | Average. | | | 1918 | | |
|---|---|---|---|---|---|---|
| | Years. | Number of years. | Cases reported. | Cases reported. | Deaths registered. | Fatalities per 100 cases. |
| Kansas City, Kans | 1914,1917 | 2 | 57 | 78 | 13 | 16.7 |
| Kansas City, Mo | 1913-1917 | 5 | 97 | 113 | ..... | ..... |
| Lawrence, Mass | 1913-1917 | 5 | 55 | 38 | 10 | 26.3 |
| Los Angeles, Calif | 1913-1917 | 5 | 202 | 167 | 16 | 9.6 |
| Louisville, Ky | 1913-1917 | 5 | 137 | 158 | 30 | 19.0 |
| Lowell, Mass | 1913-1917 | 5 | 72 | 21 | 2 | 9.5 |
| Lynn, Mass | 1913-1917 | 5 | 83 | 23 | 1 | 4.3 |
| Memphis, Tenn | 1917 | 1 | 248 | 118 | 23 | 19.5 |
| Milwaukee, Wis | 1913-1914, 1916-1917 | 4 | 219 | 103 | 28 | 27.2 |
| Minneapolis, Minn | 1915-1917 | 3 | 167 | 197 | 31 | 15.7 |
| Nashville, Tenn | 1913-1917 | 5 | 323 | 262 | 39 | 14.9 |
| Newark, N. J | 1913-1917 | 5 | 160 | ..... | 15 | ..... |
| New Bedford, Mass | 1914-1917 | 4 | 109 | 48 | 10 | 20.8 |
| New Haven, Conn | 1913-1917 | 5 | 105 | 68 | 8 | 11.8 |
| New Orleans, La | 1913-1917 | 5 | 306 | 227 | 77 | 33.9 |
| New York, N. Y | 1913-1917 | 5 | 2,083 | 1,238 | 196 | 15.8 |
| Oakland, Cal | 1914-1917 | 4 | 105 | 72 | 10 | 13 9 |
| Oklahoma, Okla | 1913-1917 | 5 | 50 | 28 | 9 | 32.1 |
| Omaha, Nebr | 1913-1914, 1916-1917 | 4 | 33 | ..... | 11 | ..... |
| Paterson, N. J | 1913-1917 | 5 | 62 | 17 | 3 | 17.6 |
| Philadelphia, Pa | 1913-1917 | 5 | 929 | 383 | 85 | 22.2 |
| Pittsburgh, Pa | 1913-1917 | 5 | 379 | 147 | 58 | 39.5 |
| Portland, Oreg | 1916-1917 | 2 | 76 | 41 | 15 | 36.6 |
| Providence, R. I | 1913-1917 | 5 | 185 | 78 | 13 | 16.7 |
| Reading, Pa | 1914-1917 | 4 | 149 | 36 | 14 | 38.9 |
| Richmond, Va | 1914-1917 | 4 | 157 | 105 | 12 | 11.4 |
| Rochester, N. Y | 1913-1914, 1916-1917 | 4 | 109 | 27 | 5 | 18.5 |
| Salt Lake City, Utah | 1913-1917 | 5 | 151 | 38 | 9 | 23.7 |
| San Antonio, Tex | 1913, 1915-1917 | 4 | 92 | 314 | 66 | 21.0 |
| San Francisco, Calif | 1913-1917 | 5 | 231 | 97 | 22 | 22.7 |
| Schenectady, N. Y | 1913-1917 | 5 | 55 | 15 | 3 | 20.0 |
| Scranton, Pa | 1914-1917 | 4 | 43 | 29 | 8 | 27.6 |
| Seattle, Wash | 1913-1917 | 5 | 91 | 35 | 9 | 25.7 |
| Spokane, Wash | 1913, 1916, 1917 | 3 | 55 | 53 | 15 | 28.3 |
| Springfield, Mass | 1913-1917 | 5 | 56 | 29 | 4 | 13.8 |
| St. Louis, Mo | 1913-1917 | 5 | 534 | 351 | 58 | 16.5 |
| St. Paul, Minn | 1913-1917 | 5 | 113 | 47 | 9 | 19.1 |
| Syracuse, N. Y | 1913-1917 | 5 | 71 | 42 | 15 | 35.7 |
| Tacoma, Wash | 1913-1914, 1916-1917 | 4 | 35 | 17 | 7 | 41.2 |
| Toledo, Ohio | 1913-1917 | 5 | 298 | 98 | 26 | 26.5 |
| Trenton, N. J | 1914-1917 | 4 | 65 | 28 | 11 | 39.3 |
| Washington, D. C | 1913-1917 | 5 | 361 | 218 | 48 | 22.0 |
| Worcester, Mass | 1913-1914, 1916-1917 | 4 | 63 | 25 | 5 | 20.0 |
| Yonkers, N. Y | 1913-1914, 1916-1917 | 4 | 21 | 16 | 2 | 12.5 |
| Youngstown, Ohio | 1916-1917 | 2 | 95 | 86 | 49 | 57.0 |

# MARRIAGE OF DISEASED PERSONS.

## NEW JERSEY COURT DECIDES THAT CONCEALMENT OF TUBERCULOSIS IS CAUSE FOR ANNULLING MARRIAGE.

The New Jersey Court of Chancery has decided [1] that a marriage can be annulled where one of the parties concealed the fact that he had chronic tuberculosis.

In a suit by a wife for the annulment of her marriage it was shown that the husband had concealed the fact that he was suffering from chronic tuberculosis for fear that if he told her she would not marry him. The court held that the concealment was such fraud as would warrant the annulment of the marriage. In the opinion it was said:

* * * Defendant at the time of the marriage was, to his knowledge, suffering from chronic tuberculosis. His father had died of tuberculosis prior to the marriage. Defendant did not inform his wife of his condition. He concealed it because of a fear on his part that if he told her she would not marry him. The death of the father was falsely represented to the wife, prior to the marriage, as due to pneumonia. Petitioner did not discover that defendant was suffering from tuberculosis until November, 1916, and immediately upon the discovery ceased cohabitation. The medical testimony is to the effect that tuberculosis is an infectious, contagious disease, transmissible to offspring. If the disease itself is not transmitted, there is grave danger that offspring will be predisposed to the disease. * * *

The conduct of the defendant in the case at bar in concealing the fact that he was at the time of the marriage suffering from hereditary chronic tuberculosis was undoubtedly fraudulent. The question, then, is whether, under Carris *v.* Carris, to relieve against such fraud would be against good policy, sound morality, and the peculiar nature of the marriage relation. I am convinced to the contrary. * * * It is well known, aside now from the medical testimony in this case, that close contact with one suffering from tuberculosis involves great danger of transmission both through infection and contagion. It is almost impossible to conceive the ordinary relationship of husband and wife existing without that danger ever present. There is always also great danger of transmittal of the disease to offspring, and, as I have stated before, if the disease itself is not transmitted, there are likely to be transmitted characteristics which predispose toward the development of the disease. False representations with respect to its existence go then, I think, to an essential of the marriage relation. They are very different from representations with respect to health in general. They are more akin to representations of freedom from leprosy or diseases of similar nature.

I can not agree that the only diseases which affect an essential of the marriage relation are those of a venereal nature. I can see nothing whatever in good policy, sound morality, or the peculiar nature of the marriage relation which would warrant the court, after having found the fraud, denying relief. Neither good morals nor public policy are subserved by compelling parties to live together as man and wife, with the ever-present danger of infection, and beget offspring liable to be tuberculously inclined, nor are they subserved by compelling a woman who has married under a misrepresentation with respect to the fact to continue to be bound to a man affected with tuberculosis without having the close intimacy to which she is entitled. * * * The suppression by defendant of the fact that he was suffering from tuberculosis of the nature that he was, for the reason that he did suppress it, is equivalent in law to an express representation on his part that he was free from it. * * *

---

[1] Davis *v.* Davis, 106 Atl., 644.

# DEATHS DURING WEEK ENDED JULY 19, 1919, IN CITIES.

From the "Weekly Health Index," July 22, 1919, issued by the Bureau of the Census, Department of Commerce.

*Deaths from all causes in certain large cities of the United States during the week ended July 19, 1919, infant mortality (per cent), annual death rates, and comparison with corresponding week of preceding years.*

| City. | Population July 1, 1918, estimated. | Week ended July 19, 1919. | | Average annual death rate per 1,000.[2] | | Per cent of deaths under 1 year. | |
|---|---|---|---|---|---|---|---|
| | | Total deaths. | Death rate.[1] | | | Week ended July 19, 1919. | Previous year or years.[3] |
| Albany | 112,565 | 21 | 9.7 | C | 10.7 | 9.5 | C 8.7 |
| Atlanta | 201,732 | 47 | 12.1 | C | 12.4 | 14.9 | C 14.6 |
| Baltimore | [3] 669,981 | 173 | 13.5 | A | 17.5 | 30.6 | A 25.1 |
| Birmingham | 197,670 | 49 | 12.9 | A | 18.4 | 10.2 | A 14.7 |
| Boston | 785,245 | 175 | 11.6 | A | 13.0 | 13.1 | A 15.7 |
| Buffalo | 473,229 | 112 | 12.3 | C | 12.9 | 12.5 | C 15.4 |
| Cambridge | 111,432 | 22 | 10.3 | A | 9.9 | 22.7 | A 10.7 |
| Chicago | 2,596,681 | 475 | 9.5 | A | 12.6 | 19.6 | A 20.1 |
| Cincinnati | 418,022 | 112 | 14.0 | C | 13.8 | 16.1 | C 10.8 |
| Cleveland | 810,306 | 146 | 9.4 | C | 12.0 | 19.2 | C 24.2 |
| Columbus | 225,296 | 57 | 13.2 | C | 11.1 | 21.1 | C 10.4 |
| Dayton | 130,655 | 37 | 14.8 | C | 16.0 | 10.8 | C 5.0 |
| Denver | | 53 | | | | 7.5 | |
| Fall River | 128,392 | 27 | 11.0 | C | 15.0 | 18.5 | C 45.9 |
| Grand Rapids | 135,450 | 27 | 10.4 | C | 9.6 | 7.4 | C 4.0 |
| Indianapolis | 290,389 | 65 | 11.7 | C | 13.5 | 10.8 | C 16.0 |
| Kansas City | 313,785 | 71 | 11.8 | C | 12.6 | 12.7 | C 7.9 |
| Los Angeles | 568,495 | 125 | 11.5 | A | 11.5 | 8.0 | A 10.9 |
| Louisville | 242,707 | 59 | 12.7 | C | 13.3 | 8.5 | C 12.9 |
| Lowell | 109,081 | 21 | 10.0 | A | 13.6 | 19.0 | A 28.4 |
| Memphis | 154,759 | 74 | 24.9 | C | 15.8 | 13.5 | C 4.3 |
| Milwaukee | 453,481 | 73 | 8.4 | A | 9.4 | 20.5 | A 16.1 |
| Minneapolis | 383,442 | 53 | 7.2 | C | 7.6 | 7.5 | C 21.4 |
| Nashville | 119,215 | 35 | 15.3 | C | 22.3 | 14.3 | C 11.8 |
| Newark | 428,684 | 61 | 7.4 | C | 13.1 | 18.0 | C 30.6 |
| New Haven | 154,865 | 32 | 10.8 | C | 14.8 | 18.8 | C 18.2 |
| New Orleans | 382,273 | 128 | 17.5 | A | 18.6 | 11.7 | A 13.2 |
| New York | 5,215,879 | 1,055 | 10.5 | C | 11.7 | 15.9 | C 15.8 |
| Oakland | 214,206 | 42 | 10.2 | A | 9.6 | 4.8 | A 13.7 |
| Omaha | 180,264 | 36 | 10.4 | C | 10.4 | 11.1 | C 11.1 |
| Philadelphia | 1,761,371 | 380 | 11.2 | (4) | 13.4 | 18.7 | (4) 23.5 |
| Pittsburgh | 593,303 | 134 | 11.8 | C | 13.8 | 19.4 | C 26.1 |
| Portland, Oreg. | | 67 | | | | 11.9 | C 8.8 |
| Providence | 263,613 | 42 | 8.3 | C | 15.4 | 9.5 | C 15.4 |
| Richmond | 160,719 | 44 | 14.3 | C | 17.5 | 18.2 | C 27.8 |
| Rochester | 264,856 | 43 | 8.5 | C | 11.8 | 16.3 | C 26.7 |
| St. Louis | 779,951 | 165 | 11.0 | C | 13.6 | 11.5 | C 14.7 |
| St. Paul | 257,699 | 37 | 7.5 | C | 11.9 | 5.4 | C 11.9 |
| San Francisco | 478,530 | 103 | 11.2 | C | 14.5 | 9.7 | C [illegible]8 |
| Spokane | | 22 | | | | 22.7 | C 18.2 |
| Syracuse | 161,404 | 33 | 10.7 | C | 15.2 | 12.1 | C 21.3 |
| Toledo | 262,234 | 30 | 6.0 | A | 12.6 | 16.7 | A 17.5 |
| Washington, D. C. | 401,681 | 87 | 11.3 | A | 15.8 | 14.9 | A 17.6 |
| Worcester | 173,650 | 45 | 13.5 | C | 13.2 | 13.3 | C 9.1 |

[1] Annual rates per 1,000 estimated population.
[2] "A" indicates data for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates data for the corresponding week of the year 1918.
[3] Population estimated as of July 1, 1919.
[4] Data are based on statistics of 1915, 1916, and 1917.

*Summary of information received by telegraph from industrial insurance companies for week ended July 19, 1919.*

| | |
|---|---|
| Policies in force | 40,510,915 |
| Number of death claims | 7,752 |
| Death claims per 1,000 policies in force, annual rate | 10.0 |

# PREVALENCE OF DISEASE.

*No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.*

## UNITED STATES.

### CURRENT STATE SUMMARIES.

### Telegraphic Reports for Week Ended July 26, 1919.

These reports are preliminary, and the figures are subject to change when later returns are received by the State health officers.

| ALABAMA. | Cases. |
|---|---|
| Diphtheria | 3 |
| Malaria | 32 |
| Poliomyelitis | 1 |
| Scarlet fever | 9 |
| Smallpox | 6 |
| Tuberculosis (pulmonary) | 32 |
| Typhoid fever | 26 |
| Venereal diseases | 135 |
| Whooping cough | 13 |

CONNECTICUT.

No outbreak or unusual prevalence.

| DELAWARE. | |
|---|---|
| Chancroid: | |
| State | 1 |
| Chicken pox: | |
| State | 2 |
| Erysipelas: | |
| Newark | 1 |
| Gonorrhea: | |
| State | 40 |
| Malaria: | |
| Laurel | 1 |
| Measles: | |
| Lewes | 1 |
| Mumps: | |
| State | 1 |
| Syphilis: | |
| State | 7 |
| Tuberculosis: | |
| [illegible] | 4 |
| [illegible] | 1 |
| [illegible] | 1 |
| [illegible] | 1 |

| FLORIDA. | Cases. |
|---|---|
| Diphtheria | 1 |
| Malaria | 42 |
| Scarlet fever | 2 |
| Smallpox | 3 |
| Typhoid fever | 8 |

| GEORGIA. | |
|---|---|
| Acute infectious conjunctivitis | 1 |
| Chicken pox | 1 |
| Diphtheria | 8 |
| Dysentery (amebic) | 1 |
| Dysentery (bacillary) | 7 |
| Gonorrhea | 139 |
| Hookworm | 1 |
| Influenza | 11 |
| Malaria | 92 |
| Measles | 11 |
| Mumps | 14 |
| Paratyphoid fever | 1 |
| Pneumonia (acute lobar) | 2 |
| Scarlet fever | 10 |
| Septic sore throat | 8 |
| Smallpox | 4 |
| Syphilis | 47 |
| Tuberculosis (pulmonary) | 6 |
| Tuberculosis (other than pulmonary) | 2 |
| Typhoid fever | 35 |
| Whooping cough | 9 |

| ILLINOIS. | |
|---|---|
| Cerebrospinal meningitis: | |
| Clinton County—Meridian Township | 1 |
| Waukegan | 2 |
| Freeport | 1 |
| Chancroid: | |
| State | 11 |

## CURRENT STATE SUMMARIES—Continued.

### Telegraphic Reports for Week Ended July 26, 1919—Continued.

ILLINOIS—continued.

| Diphtheria: | Cases. |
|---|---|
| Chicago | 80 |
| Quincy | 2 |
| Maywood | 2 |
| Decatur | 2 |
| State | 13 |
| Gonorrhea: | |
| State | 289 |
| Lethargic encephalitis: | |
| Chicago | 1 |
| Poliomyelitis: | |
| Chicago | 9 |
| Ladd | 1 |
| Springvalley | 1 |
| La Salle | 1 |
| Seneca | 1 |
| Mark | 1 |
| Freeport | 1 |
| Scarlet fever: | |
| Chicago | 23 |
| Morris | 4 |
| Springfield | 2 |
| State | 5 |
| Smallpox: | |
| Gallatin County—Eagle Creek Township | 5 |
| Green County—White Hall Township | 5 |
| Belknap | 6 |
| State | 4 |
| Syphilis: | |
| State | 173 |
| Typhoid fever: | |
| Chicago | 11 |
| Saint Elmo | 2 |
| Alton | 2 |
| Woodstock | 2 |
| Joliet | 3 |
| Allendale | 3 |
| Belmont | 3 |
| Mount Carmel | 2 |
| State | 14 |

INDIANA.

| Chancroid: | |
|---|---|
| State | 2 |
| Diphtheria: | |
| Warsaw | 1 |
| Aurora | 1 |
| Hobbs | 1 |
| Bargersville | 1 |
| Bedford | 1 |
| Upland | 1 |
| Richmond | 1 |
| Gonorrhea: | |
| State | 100 |
| Paratyphoid fever: | |
| Markle | 1 |
| Syphilis: | |
| State | 101 |
| Typhoid fever: | |
| Mount Vernon | 1 |
| Terre Haute | 1 |
| Indianapolis | 1 |
| Auburn | 1 |
| Bloomington | 1 |

IOWA.

| Cerebrospinal meningitis: | Cases. |
|---|---|
| Bremer County | 1 |
| Diphtheria: | |
| Council Bluffs | 2 |
| Des Moines | 1 |
| Monroe | 1 |
| Benton County | 1 |
| Des Moines County | 1 |
| Howard County | 1 |
| Mills County | 1 |
| Polk County | 1 |
| Gonorrhea: | |
| State | 24 |
| Scarlet fever: | |
| Burlington | 2 |
| Davenport | 1 |
| Dickinson County | 1 |
| Polk County | 1 |
| Webster County | 1 |
| Smallpox: | |
| Davenport | 1 |
| Jones County | 1 |
| Lyon County | 7 |
| Syphilis: | |
| State | 27 |

KANSAS.

| | |
|---|---|
| Diphtheria | 12 |
| Scarlet fever | 8 |
| Smallpox | 13 |

LOUISIANA.

| | |
|---|---|
| Chancroid | 30 |
| Diphtheria | 9 |
| Gonorrhea | 181 |
| Influenza | 3 |
| Pellagra | 10 |
| Poliomyelitis | 1 |
| Smallpox | 2 |
| Syphilis | 138 |
| Typhoid fever | 27 |

MAINE.

| Chancroid: | |
|---|---|
| State | 2 |
| Chicken pox: | |
| State | 12 |
| Diphtheria: | |
| Rumford | 1 |
| Columbia Falls | 1 |
| Addison | 2 |
| Gonorrhea: | |
| State | 33 |
| Influenza: | |
| York | 1 |
| Augusta | 1 |
| Measles: | |
| Augusta | 3 |
| Mumps: | |
| Lewiston | 1 |
| Scarlet fever: | |
| Portland | 2 |
| Augusta | 6 |
| Norway | 1 |
| Lewiston | 1 |
| Otisfield | 1 |

## CURRENT STATE SUMMARIES—Continued.

### Telegraphic Reports for Week Ended July 26, 1919—Continued.

MAINE—continued.

| Smallpox: | Cases. |
|---|---|
| Lewiston | 3 |
| Auburn | 1 |
| Orono | 1 |
| East Livermore | 1 |
| Syphilis: | |
| State | 17 |
| Tuberculosis: | |
| State | 20 |
| Typhoid fever: | |
| Augusta | 3 |
| Portland | 2 |
| Oldtown | 1 |
| South Berwick | 1 |
| Whooping cough: | |
| Booth Bay | 3 |

MINNESOTA.

| | |
|---|---|
| Chancroid: | |
| State | 6 |
| Gonorrhea: | |
| State | 122 |
| Poliomyelitis: | |
| State | 5 |
| Smallpox: | |
| Lac Qui Parle County—Ortonville village | 1 |
| Lyon County—Monroe Township | 1 |
| Otter Tail County—Parkers Prairie Township | 1 |
| Rock County—Mound Township | 1 |
| Syphilis: | |
| State | 85 |

MONTANA.

| | |
|---|---|
| Diphtheria: | |
| State | 8 |
| Rocky Mountain spotted or tick fever: | |
| Fergus County | 1 |
| Valley County | 1 |
| Scarlet fever: | |
| State | 27 |
| Smallpox: | |
| State | 2 |
| Typhoid fever: | |
| State | 2 |

NEW JERSEY.

| | |
|---|---|
| Influenza | 4 |
| Pneumonia | 25 |

NEW YORK.

(Exclusive of New York City.)

| | |
|---|---|
| Cerebrospinal meningitis: | |
| Clarkson | 1 |
| Diphtheria: | |
| State | 107 |
| Gonorrhea: | |
| State (voluntary reports) | 66 |
| Measles: | |
| State | 135 |

NEW YORK—continued.

| Poliomyelitis: | Cases. |
|---|---|
| Patchogue | 1 |
| Utica | 1 |
| Pneumonia: | |
| State | 18 |
| Scarlet fever: | |
| State | 81 |
| Syphilis: | |
| State (voluntary reports) | 116 |
| Typhoid fever: | |
| State | 44 |
| Whooping cough: | |
| State | 129 |

NORTH CAROLINA.

| | |
|---|---|
| Cerebrospinal meningitis | 2 |
| Chancroid | 15 |
| Chicken pox | 12 |
| Cholera infantum | 2 |
| Diphtheria | 15 |
| Dysentery (bacillary) | 1 |
| Gonorrhea | 117 |
| Measles | 47 |
| Paratyphoid fever | 1 |
| Pneumonia (broncho) | 7 |
| Pneumonia (lobar) | 3 |
| Scarlet fever | 11 |
| Septic sore throat | 1 |
| Smallpox | 20 |
| Syphilis | 88 |
| Typhoid fever | 172 |
| Whooping cough | 146 |

OHIO.

No unusual prevalence reported.

VERMONT.

No unusual prevalence or outbreak.

VIRGINIA.

| | |
|---|---|
| Poliomyelitis: | |
| Dickenson County | 3 |
| Richmond | 3 |
| Smallpox: | |
| Franklin County | 1 |

WASHINGTON.

Diphtheria more frequent.

| | |
|---|---|
| Scarlet fever: | |
| Seattle | 11 |
| Aberdeen | 4 |
| Ellensburg | 2 |
| Hoquiam | 2 |
| Spokane | 5 |
| State | 6 |

Smallpox unusually prevalent.
Whooping cough more frequent.

## CURRENT STATE SUMMARIES—Continued.

### Telegraphic Reports for Week Ended July 26, 1919—Continued.

WEST VIRGINIA.

| Cerebrospinal meningitis: | Cases. |
|---|---|
| Huntington | 1 |
| Diphtheria: | |
| Bluefield | 2 |
| Buckhannon | 2 |
| Charleston | 2 |
| Huntington | 5 |
| Weston | 1 |
| Measles: | |
| State | 9 |
| Poliomyelitis: | |
| Keyser | 1 |
| Scarlet fever: | |
| Clarksburg | 1 |

WEST VIRGINIA—continued.

| Scarlet fever—Continued. | Cases. |
|---|---|
| Huntington | 2 |
| Martinsburg | 1 |
| Smallpox: | |
| Clarksburg | 2 |
| Montgomery | 1 |
| Morgantown | 1 |
| Typhoid fever: | |
| Buckhannon | 1 |
| Charleston | 3 |
| Martinsburg | 3 |
| Morgantown | 1 |
| Weston | 3 |
| Wheeling | 1 |

## SUMMARY OF CASES REPORTED MONTHLY BY STATES.

Tables showing by counties the reported cases of cerebrospinal meningitis, malaria, pellagra, poliomyelitis, smallpox, and typhoid fever are published under the names of these diseases. (See names of these and other diseases in the table of contents.)

The following monthly State reports include only those which were received during the current week. These reports appear each week as received.

| State. | Cerebrospinal meningitis. | Diphtheria. | Malaria. | Measles. | Pellagra. | Poliomyelitis. | Scarlet fever. | Smallpox. | Typhoid fever. |
|---|---|---|---|---|---|---|---|---|---|
| June, 1919: | | | | | | | | | |
| Arizona | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 2 | ..... |
| California | 5 | 194 | 56 | 85 | 7 | 1 | 186 | 153 | 105 |
| Connecticut | 2 | 122 | ..... | 383 | ..... | 1 | 127 | ..... | 23 |
| Delaware | ..... | 11 | 2 | 13 | ..... | ..... | 5 | 3 | 1 |
| Michigan | ..... | 379 | ..... | 802 | ..... | 9 | 313 | 304 | 71 |
| New Jersey | 6 | 490 | 16 | 719 | ..... | 2 | 276 | 11 | 43 |
| North Carolina | 3 | 53 | ..... | 499 | ..... | 3 | 25 | 205 | 431 |
| North Dakota | ..... | 14 | ..... | 49 | ..... | ..... | 34 | 11 | 2 |
| Ohio | 10 | 250 | 1 | 2,512 | ..... | 3 | 356 | 431 | 110 |
| Rhode Island | 2 | 41 | ..... | 26 | ..... | ..... | 43 | ..... | 11 |
| South Carolina | 3 | 26 | 107 | 22 | 40 | ..... | 3 | 79 | 190 |
| Washington | 2 | 36 | ..... | 297 | ..... | ..... | 306 | 403 | 27 |
| Wyoming | ..... | 7 | ..... | 123 | ..... | 1 | 16 | 76 | 1 |

## ANTHRAX.

### California Report for June, 1919.

During June, 1919, one case of anthrax was reported in California.

## CEREBROSPINAL MENINGITIS.

### State Reports for June, 1919.

| Place. | New cases reported. |
|---|---|
| California: | |
| Merced County | 1 |
| Orange County— | |
| Anaheim | 1 |
| Placer County | 1 |
| Sacramento County— | |
| Sacramento | 1 |
| San Francisco | 1 |
| Total | 5 |
| Connecticut: | |
| Hartford County— | |
| New Britain | 1 |
| New Haven County— | |
| Waterbury | 1 |
| Total | 2 |
| New Jersey: | |
| Essex County | 4 |
| Hunterdon County | 1 |
| Middlesex County | 1 |
| Total | 6 |
| North Carolina: | |
| Catawba County | 1 |
| Gaston County | 1 |
| Guilford County | 1 |
| Total | 3 |
| Ohio: | |
| Allen County | 1 |
| Columbiana County | 1 |
| Cuyahoga County | 2 |
| Hamilton County | 4 |
| Lorain County | 1 |
| Richland County | 1 |
| Total | 10 |
| Rhode Island: | |
| Providence County— | |
| Providence | 1 |
| Pawtucket | 1 |
| Total | 2 |
| South Carolina: | |
| Greenville County | 1 |
| Sumter County | 2 |
| Total | 3 |
| Washington: | |
| King County— | |
| Seattle | 2 |

### City Reports for Week Ended July 12, 1919.

| Place. | Cases. | Deaths. | Place. | Cases. | Deaths. |
|---|---|---|---|---|---|
| Asbury Park, N. J. | 1 | ..... | Kalamazoo, Mich. | 1 | 1 |
| Atlanta, Ga. | ..... | 1 | Milwaukee, Wis. | 2 | 2 |
| Bayonne, N. J. | 1 | ..... | Newburyport, Mass. | 1 | ..... |
| Boise, Idaho | 1 | 1 | New York, N. Y. | 8 | 4 |
| Cambridge, Mass. | ..... | 1 | Philadelphia, Pa. | 4 | 3 |
| Cedar Rapids, Iowa | 1 | ..... | Rochester, N. Y. | 1 | 1 |
| Charlotte, N. C. | ..... | 1 | St. Louis, Mo. | 1 | ..... |
| Chicago, Ill. | 1 | ..... | San Francisco, Calif. | 2 | ..... |
| Danville, Ill. | ..... | 1 | Savannah, Ga. | 1 | ..... |
| Duluth, Minn. | 1 | ..... | West Hoboken, N. J. | 1 | ..... |
| El Paso, Tex. | ..... | 4 | | | |

## DIPHTHERIA.

See Telegraphic weekly reports from States, p. 1711; Monthly summaries by States, p. 1714, and Weekly reports from cities, p. 1728.

## LEPROSY.

### Contra Costa County, Calif., Los Angeles, Calif., and New Orleans, La.

During the month of June, 1919, one case of leprosy in the person of M. D., Chinese, male, age 30, was reported in Contra Costa County, Calif. The patient is isolated at the County Hospital.

At Los Angeles, Calif., the case of F. R., Mexican, male, age 45, was reported on June 10. The patient is isolated at the County Hospital.

During the week ended July 12, 1919, one case of leprosy was reported at New Orleans, La.

## LETHARGIC ENCEPHALITIS.

### Santa Barbara, Calif., Week Ended July 12, 1919.

During the week ended July 12, 1919, one case of lethargic encephalitis, with one death, was reported at Santa Barbara, Calif.

## MALARIA.

### State Reports for June, 1919.

| Place. | New cases reported. |
|---|---|
| California: | |
| Alameda County— | |
| Alameda | 1 |
| Butte County | 5 |
| Chico | 3 |
| Gridley | 11 |
| Calaveras County— | |
| Angels | 2 |
| Colusa County | 1 |
| El Dorado County | 1 |
| Fresno County | 3 |
| Clovis | 1 |
| Firebaugh | 1 |
| Reedley | 1 |
| Kern County | 4 |
| Los Angeles County— | |
| Long Beach | 1 |
| South Pasadena | 1 |
| San Joaquin County— | |
| Manteca | 1 |
| Stockton | 1 |
| Tracy | 1 |
| Santa Clara County— | |
| Gilroy | 3 |
| Shasta County | 3 |
| Redding | 2 |
| Solano County— | |
| Mare Island | 1 |
| Sonoma County— | |
| Santa Rosa | 1 |
| Tuolumne County | 1 |
| Total | 50 |
| Connecticut: | |
| Hartford County— | |
| Rocky Hill | 2 |
| New London County— | |
| Norwich | 3 |
| Connecticut—Continued. | |
| New Haven County— | |
| New Haven | 1 |
| Total | 6 |
| Delaware: | |
| Kent County— | |
| Dover | 2 |
| New Jersey: | |
| Bergen County | 1 |
| Essex County | 4 |
| Mercer County | 3 |
| Middlesex County | 2 |
| Monmouth County | 1 |
| Passaic County | 2 |
| Somerset County | 2 |
| Sussex County | 1 |
| Total | 16 |
| Ohio: | |
| Ross County | 1 |
| South Carolina: | |
| Abbeville County | 12 |
| Beaufort County | 14 |
| Chester County | 10 |
| Chesterfield County | 1 |
| Clarendon County | 17 |
| Dillon County | 1 |
| Lexington County | 5 |
| Marion County | 28 |
| Richland County | 5 |
| Spartanburg County | 7 |
| Union County | 4 |
| York County | 3 |
| Total | 107 |

### City Reports for Week Ended July 12, 1919.

| Place. | Cases. | Deaths. |
|---|---|---|
| Alexandria, La | 4 | |
| Atlanta, Ga | 1 | |
| Birmingham, Ala | 5 | 1 |
| Columbus, Ga | 4 | |
| Dallas, Tex | 1 | 1 |
| Danville, Ill | 4 | |
| East St. Louis, Ill | 20 | |
| Framingham, Mass | 1 | |
| Kansas City, Kans | 1 | |
| Little Rock, Ark | 4 | |
| Los Angeles, Calif | 1 | |
| Memphis, Tenn | 2 | |
| Moline, Ill | 1 | |
| Nashville, Tenn | | 1 |
| Newark, N. J | 3 | |
| New Orleans, La | 1 | |
| Pine Bluff, Ark | 3 | |
| Plainfield, N. J | 1 | |
| Redlands, Calif | 1 | |
| San Francisco, Calif | 1 | |
| Savannah, Ga | | 1 |
| Winston-Salem, N. C | 1 | |

## MEASLES.

See Telegraphic weekly reports from States, p. 1711; Monthly summaries by States, p. 1714; and Weekly reports from cities, p. 1728.

## PELLAGRA.

### State Reports for June, 1919.

| Place. | New cases reported. |
|---|---|
| California: | |
| Los Angeles County— | |
| Los Angeles | 1 |
| Pasadena | 1 |
| Riverside County— | |
| Riverside | 2 |
| San Diego County— | |
| San Diego | 1 |
| National City | 1 |
| Tulare County— | |
| Visalia | 1 |
| Total | 7 |
| South Carolina: | |
| Abbeville County | 3 |
| Beaufort County | 2 |
| Charleston County | 2 |
| Cherokee County | 1 |
| Chester County | 7 |
| Clarendon County | 5 |
| Edgefield County | 1 |
| Fairfield County | 1 |
| Georgetown County | 2 |
| Greenville County | 1 |
| Greenwood County | 2 |
| Marion County | 1 |
| Newberry County | 1 |
| Pickens County | 1 |
| Richland County | 3 |
| Spartanburg County | 5 |
| Sumter County | 1 |
| York County | 1 |
| Total | 40 |

### City Reports for Week Ended July 12, 1919.

| Place. | Cases. | Deaths. |
|---|---|---|
| Anniston, Ala. | 1 | |
| Asheville, N. C. | | 1 |
| Atlanta, Ga. | | 1 |
| Birmingham, Ala. | 1 | 3 |
| Charleston, S. C. | | 1 |
| Columbus, Ga. | 2 | |
| Cumberland, Md. | 1 | |
| Dallas, Tex. | 2 | |
| Fort Worth, Tex. | | 2 |
| Macon, Ga. | | 1 |
| Memphis, Tenn. | | 1 |
| Montgomery, Ala. | | 1 |
| Muscatine, Iowa | 1 | |
| New Orleans, La. | 4 | 3 |
| Norwood, Ohio | 1 | |
| Pine Bluff, Ark. | 1 | |
| Richmond, Va. | 1 | 1 |
| Waco, Tex. | | 2 |
| Wilmington, N. C. | 4 | |

## PLAGUE-INFECTED GROUND SQUIRRELS.

### Alameda County, Calif., July 2, 1919.

On July 2, 1919, two plague-infected ground squirrels were reported found in Alameda County, Calif. In each case diagnosis was based upon animal inoculation and cultures. Intensive hunting and poisoning operations are being carried on.

## PNEUMONIA.

### City Reports for Week Ended July 12, 1919.

| Place. | Lobar. | | All forms. | |
|---|---|---|---|---|
| | Cases. | Deaths. | Cases. | Deaths. |
| Atlanta, Ga. | ..... | 1 | ..... | ..... |
| Atlantic City, N. J. | 1 | ..... | ..... | ..... |
| Baltimore, Md. | 3 | 3 | ..... | ..... |
| Binghamton, N. Y. | 2 | 1 | ..... | ..... |
| Birmingham, Ala. | ..... | 2 | ..... | ..... |
| Boston, Mass. | 13 | 2 | ..... | ..... |
| Bridgeport, Conn. | ..... | 1 | ..... | ..... |
| Buffalo, N. Y. | ..... | 1 | ..... | ..... |
| Cambridge, Mass. | 3 | ..... | ..... | ..... |
| Charlotte, N. C. | ..... | 1 | ..... | ..... |
| Chicago, Ill. | ..... | ..... | 67 | 28 |
| Chicopee, Mass. | 1 | ..... | ..... | ..... |
| Cincinnati, Ohio. | ..... | 2 | ..... | ..... |
| Cleveland, Ohio. | 2 | 11 | ..... | ..... |
| Clinton, Mass. | 1 | ..... | ..... | ..... |
| Covington, Ky. | ..... | 1 | ..... | ..... |
| Denver, Colo. | ..... | ..... | ..... | 3 |
| Detroit, Mich. | 1 | 6 | ..... | 7 |
| Dubuque, Iowa. | ..... | 1 | ..... | ..... |
| Duluth, Minn. | 1 | 1 | ..... | ..... |
| East Chicago, Ind. | ..... | ..... | ..... | 1 |
| Elmira, N. Y. | ..... | 1 | ..... | ..... |
| El Paso, Tex. | ..... | 1 | ..... | ..... |
| Everett, Mass. | 1 | ..... | ..... | ..... |
| Flint, Mich. | 1 | 1 | ..... | ..... |
| Fort Worth, Tex. | ..... | ..... | ..... | ..... |
| Galesburg, Ill. | ..... | 1 | ..... | ..... |
| Galveston, Tex. | ..... | 1 | ..... | ..... |
| Great Falls, Mont. | ..... | 1 | ..... | ..... |
| Hackensack, N. J. | ..... | ..... | ..... | 1 |
| Haverhill, Mass. | 1 | ..... | ..... | ..... |
| Indianapolis, Ind. | ..... | ..... | ..... | 2 |
| Ironwood, Mich. | 1 | ..... | ..... | ..... |
| Ithaca, N. Y. | 1 | ..... | ..... | ..... |
| Jamestown, N. Y. | ..... | ..... | 1 | ..... |
| Jersey City, N. J. | ..... | 1 | ..... | ..... |
| Kansas City, Mo. | 2 | 7 | ..... | ..... |
| Kearny, N. J. | 1 | 1 | ..... | ..... |
| Leominster, Mass. | 1 | ..... | ..... | ..... |
| Logansport, Ind. | ..... | ..... | ..... | 1 |
| Los Angeles, Calif. | 5 | ..... | ..... | ..... |
| Lynn, Mass. | 1 | ..... | ..... | ..... |
| Macon, Ga. | ..... | 1 | ..... | ..... |
| Medford, Mass. | ..... | 1 | ..... | ..... |
| Memphis, Tenn. | ..... | 3 | ..... | ..... |
| Milwaukee, Wis. | ..... | 4 | ..... | ..... |
| Minneapolis, Minn. | ..... | 1 | ..... | ..... |
| Montgomery, Ala. | ..... | 2 | ..... | ..... |
| Newark, N. J. | 7 | 2 | ..... | ..... |
| Newburgh, N. Y. | 1 | ..... | ..... | ..... |
| New Orleans, La. | ..... | 7 | ..... | ..... |
| Newton, Mass. | ..... | 1 | ..... | ..... |
| New York, N. Y. | ..... | ..... | 3 | 83 |
| Northampton, Mass. | 1 | ..... | ..... | ..... |
| Oakland, Calif. | ..... | 4 | ..... | ..... |
| Oklahoma City, Okla. | ..... | ..... | ..... | 1 |
| Olean, N. Y. | ..... | ..... | ..... | 1 |
| Omaha, Nebr. | ..... | ..... | ..... | 2 |
| Orange, N. J. | 1 | ..... | ..... | ..... |
| Parsons, Kans. | ..... | ..... | 1 | ..... |
| Pasadena, Calif. | ..... | ..... | ..... | 1 |
| Paterson, N. J. | ..... | ..... | 5 | ..... |
| Peoria, Ill. | ..... | 1 | ..... | ..... |
| Philadelphia, Pa. | 29 | 16 | ..... | ..... |
| Portsmouth, Va. | ..... | 3 | ..... | ..... |
| Providence, R. I. | ..... | 1 | ..... | ..... |
| Racine, Wis. | ..... | 1 | ..... | ..... |
| Richmond, Va. | ..... | 1 | ..... | ..... |
| Rochester, N. Y. | ..... | 1 | ..... | ..... |
| Rome, N. Y. | 1 | ..... | ..... | ..... |
| Salem, Mass. | 1 | 1 | ..... | ..... |
| San Francisco, Calif. | 6 | 3 | ..... | ..... |
| Saratoga Springs, N. Y. | 1 | ..... | ..... | ..... |
| Schenectady, N. Y. | 1 | ..... | ..... | ..... |
| Springfield, Ohio. | 1 | ..... | ..... | ..... |
| Syracuse, N. Y. | ..... | 1 | ..... | ..... |
| Trenton, N. J. | ..... | 1 | ..... | ..... |
| Washington, D. C. | ..... | 4 | ..... | ..... |
| West Orange, N. J. | 1 | ..... | ..... | ..... |
| Wilmington, Del. | ..... | 2 | ..... | ..... |
| Wilmington, N. C. | ..... | 1 | ..... | ..... |
| Worcester, Mass. | 1 | 2 | ..... | ..... |
| Yonkers, N. Y. | ..... | 2 | ..... | ..... |
| Youngstown, Ohio. | ..... | 1 | ..... | ..... |

## POLIOMYELITIS (INFANTILE PARALYSIS).

### State Reports for June, 1919.

| Place. | New cases reported. |
|---|---|
| California: | |
| Stanislaus County | 1 |
| Connecticut: | |
| Litchfield County— | |
| New Milford | 1 |
| Michigan: | |
| Kent County— | |
| Grand Rapids City | 1 |
| Oakland County— | |
| Pontiac | 7 |
| Wayne County— | |
| Detroit | 1 |
| Total | 9 |
| New Jersey: | |
| Mercer County | 1 |
| Warren County | 1 |
| Total | 2 |
| North Carolina: | |
| Buncombe County | 1 |
| Wake County | 2 |
| Total | 3 |
| Ohio: | |
| Defiance County | 1 |
| Highland County | 1 |
| Summit County | 1 |
| Total | 3 |
| Wyoming: | |
| Freemont County | 1 |

## POLIOMYELITIS (INFANTILE PARALYSIS)—Continued.

### City Reports for Week Ended July 12, 1919.

| Place. | Cases. | Deaths. | Place. | Cases. | Deaths. |
|---|---|---|---|---|---|
| Baltimore, Md | 1 | ..... | Newark, N. J | 1 | ..... |
| Charleston, W. Va | 1 | ..... | New Orleans, La | 1 | ..... |
| Chicago, Ill | 6 | 2 | Norfolk, Va | 1 | ..... |
| Dubuque, Iowa | 1 | 1 | Pontiac, Mich | 1 | 1 |
| Los Angeles, Calif | 2 | ..... | St. Louis, Mo | 1 | ..... |
| Marinette, Wis | 1 | ..... | Waco, Tex | 1 | ..... |
| Milwaukee, Wis | 6 | 1 | | | |

## RABIES IN ANIMALS.

### Detroit, Mich., and Rocky Mount, N. C.

During the week ended July 12, 1919, there were reported one case of rabies in animals at Detroit, Mich., and one at Rocky Mount, N. C.

## ROCKY MOUNTAIN SPOTTED OR TICK FEVER.

### Fremont County, Wyo., June, 1919.

During the month of June, 1919, two cases of Rocky Mountain spotted or tick fever were reported in Fremont County, Wyo.

## SCARLET FEVER.

See Telegraphic weekly reports from States, p. 1711; Monthly summaries by States, p. 1714; and Weekly reports from cities, p. 1728.

## SMALLPOX.

### State Reports for June, 1919—Vaccination Histories.

| Place. | New cases reported. | Deaths. | Vaccination history of cases. | | | |
|---|---|---|---|---|---|---|
| | | | Number vaccinated within 7 years preceding attack. | Number last vaccinated more than 7 years preceding attack. | Number never successfully vaccinated. | Vaccination history not obtained or uncertain. |
| Arizona: | | | | | | |
| Prescott County— | | | | | | |
| Yavapai | 2 | ..... | ..... | ..... | 2 | ..... |
| California: | | | | | | |
| Alameda County— | | | | | | |
| Alameda | 4 | ..... | ..... | ..... | 4 | ..... |
| Oakland | 5 | ..... | ..... | 1 | 3 | 1 |
| Butte County— | | | | | | |
| Chico | 1 | ..... | ..... | ..... | 1 | ..... |
| Colusa County | 2 | ..... | ..... | ..... | 2 | ..... |
| Colusa City | 6 | ..... | ..... | ..... | 6 | ..... |
| Fresno County | 14 | ..... | ..... | 1 | 13 | ..... |
| Humboldt County— | | | | | | |
| Arcata | 1 | ..... | ..... | ..... | 1 | ..... |
| Eureka | 1 | ..... | ..... | ..... | ..... | 1 |
| Imperial County— | | | | | | |
| Brawley | 1 | ..... | ..... | ..... | 1 | ..... |
| Imperial | 1 | ..... | ..... | 1 | ..... | ..... |
| Los Angeles County | 1 | ..... | ..... | 1 | ..... | ..... |
| Los Angeles | 3 | ..... | ..... | ..... | 3 | ..... |
| Long Beach | 6 | ..... | ..... | 1 | 5 | ..... |
| Merced County | 1 | ..... | ..... | ..... | 1 | ..... |

## SMALLPOX—Continued.

### State Reports for June, 1919—Vaccination Histories—Continued.

| Place. | New cases reported. | Deaths. | Vaccination history of cases. | | | |
|---|---|---|---|---|---|---|
| | | | Number vaccinated within 7 years preceding attack. | Number last vaccinated more than 7 years preceding attack. | Number never successfully vaccinated. | Vaccination history not obtained or uncertain. |
| California—Continued. | | | | | | |
| Monterey County— | | | | | | |
| Monterey | 2 | | | | 2 | |
| Pacific Grove | 1 | | | | 1 | |
| Orange County | 5 | | | | 5 | |
| San Diego County— | | | | | | |
| San Diego | 5 | | | | 5 | |
| San Francisco | 17 | | | 2 | 15 | |
| San Joaquin County | 4 | | | | 4 | |
| Stockton | 23 | | | 1 | 22 | |
| San Mateo County— | | | | | | |
| South San Francisco | 1 | | | 1 | | |
| Santa Clara County | 8 | | | 1 | 7 | |
| San Jose | 37 | | | | 37 | |
| Solano County— | | | | | | |
| Vallejo | 1 | | | | 1 | |
| Stanislaus County— | | | | | | |
| Turlock | 1 | | | | 1 | |
| Yolo County | 1 | | | | 1 | |
| Total | 153 | | | 10 | 141 | 2 |
| Michigan: | | | | | | |
| Allegan County— | | | | | | |
| Cheshire Township | 1 | | | | 1 | |
| Gun Plains Township | 1 | | | | | 1 |
| Plainwell | 14 | | | | 14 | |
| Barry County— | | | | | | |
| Hastings Township | 1 | | | | | 1 |
| Maple Grove Township | 1 | | 1 | | | |
| Berrien County— | | | | | | |
| Galien Township | 1 | | | | 1 | |
| Niles | 1 | | | | 1 | |
| Calhoun County— | | | | | | |
| Battle Creek | 7 | | 1 | 3 | 3 | |
| Cheboygan County— | | | | | | |
| Cheboygan | 1 | | | | 1 | |
| Chippewa County— | | | | | | |
| Dafter Township | 1 | | | | | 1 |
| Whitefish Township | 4 | | 1 | | 3 | |
| Clare County— | | | | | | |
| Farwell | 1 | | 1 | | | |
| Garfield Township | 5 | | | | 5 | |
| Grant Township | 1 | | | | | 1 |
| Clinton County— | | | | | | |
| Dewitt Township | 2 | | 1 | | 1 | |
| Riley Township | 1 | | | | 1 | |
| Victor Township | 2 | | | | 2 | |
| Westphalia Township | 1 | | | | 1 | |
| Crawford County— | | | | | | |
| Grayling | 3 | | | 1 | 1 | 1 |
| Eaton County— | | | | | | |
| Delta Township | 1 | | | | 1 | |
| Grand Ledge | 13 | | 1 | | 12 | |
| Oneida Township | 2 | | | | 2 | |
| Emmett County— | | | | | | |
| Petoskey | 1 | | | | 1 | |
| Genesee County— | | | | | | |
| Flint | 2 | | | | 2 | |
| Genesee Township | 1 | | | | 1 | |
| Gogebic County— | | | | | | |
| Bessemer | 1 | | | | 1 | |
| Ironwood | 1 | | | | 1 | |
| Gratiot County— | | | | | | |
| Alma | 10 | | | 3 | 7 | |
| Ithaca | 1 | | | 1 | | |
| Houghton County— | | | | | | |
| Adams Township | 7 | | 1 | 1 | 5 | |
| Hubbell | 5 | | 2 | 1 | 2 | |
| South Range | 1 | | | | 1 | |

## SMALLPOX—Continued.

### State Reports for June, 1919—Vaccination Histories—Continued.

| Place. | New cases reported. | Deaths. | Vaccination history of cases. | | | |
|---|---|---|---|---|---|---|
| | | | Number vaccinated within 7 years preceding attack. | Number last vaccinated more than 7 years preceding attack. | Number never successfully vaccinated. | Vaccination history not obtained or uncertain. |
| Michigan—Continued. | | | | | | |
| Ingham County— | | | | | | |
| Aurelius Township | 1 | | | | 1 | |
| Delhi Township | 1 | | | | 1 | |
| East Lansing | 1 | | | | 1 | |
| Lansing Township | 1 | | | | 1 | |
| Lansing | 38 | | | 7 | 31 | |
| Williamston Township | 1 | | | | 1 | |
| Ionia County— | | | | | | |
| Portland | 1 | | | | 1 | |
| Iron County— | | | | | | |
| Stambaugh | 1 | | | | 1 | |
| Isabella County— | | | | | | |
| Broomfield Township | 1 | | | | 1 | |
| Deerfield Township | 3 | | | | 3 | |
| Mount Pleasant | 1 | | | | 1 | |
| Nottawa Township | 1 | | | 1 | | |
| Rolland Township | 3 | | | | 3 | |
| Vernon Township | 1 | | | | 1 | |
| Wise Township | 1 | | | | 1 | |
| Jackson County— | | | | | | |
| Jackson | 24 | | 3 | 4 | 17 | |
| Kalamazoo County— | | | | | | |
| Kalamazoo | 10 | | | 2 | 8 | |
| Kalamazoo Township | 1 | | | | 1 | |
| Richland Township | 4 | | | 1 | 3 | |
| Kent County— | | | | | | |
| Grand Rapids Township | 1 | | | 1 | | |
| Grand Rapids | 9 | | | | | 9 |
| Lowell | 1 | | | | 1 | |
| Keweenaw County— | | | | | | |
| Allonez Township | 11 | | 2 | | 9 | |
| Eagle River Township | 1 | | 1 | | | |
| Houghton Township | 1 | | | | 1 | |
| Lenawee County— | | | | | | |
| Hudson | 1 | | | | 1 | |
| Palmyra Township | 1 | | | | 1 | |
| Marquette County— | | | | | | |
| Marquette | 9 | | | 1 | 8 | |
| Mecosta County— | | | | | | |
| Millbrook Township | 1 | | | | | 1 |
| Menominee County— | | | | | | |
| Ingalston Township | 1 | | | | 1 | |
| Midland County— | | | | | | |
| Coleman | 4 | | 1 | 2 | 1 | |
| Ingersall Township | 1 | | | | 1 | |
| Mount Haley Township | 1 | | | | 1 | |
| Monroe County— | | | | | | |
| Monroe | 1 | | | | 1 | |
| Muskegon County— | | | | | | |
| Muskegon Heights | 3 | | | | 3 | |
| Newaygo County— | | | | | | |
| Garfield Township | 2 | | | | 2 | |
| Ogemaw County— | | | | | | |
| Hill Township | 1 | | | | 1 | |
| Ottawa County— | | | | | | |
| Georgetown Township | 2 | | | 2 | | |
| Saginaw County— | | | | | | |
| Saginaw | 2 | | | | 1 | 1 |
| St. Clair County— | | | | | | |
| St. Clair Township | 1 | | | | 1 | |
| Shiawassee County— | | | | | | |
| Antrim Township | 2 | | 1 | | 1 | |
| Laingsbury | 2 | | 1 | | 1 | |
| Owosso | 2 | | | | 2 | |
| Sciota Township | 2 | | | | 2 | |
| Woodhull Township | 1 | | | | 1 | |
| Washtenaw County— | | | | | | |
| Ann Arbor | 1 | | | | 1 | |
| Wayne County— | | | | | | |
| Detroit | 44 | | | 3 | 22 | 19 |
| Highland Park | 2 | | | 1 | 1 | |
| Van Buren Township | 3 | | | 1 | 2 | |
| Total | 304 | | 18 | 36 | 215 | 35 |

## SMALLPOX—Continued.

### State Reports for June, 1919—Vaccination Histories—Continued.

| Place. | New cases reported. | Deaths. | Vaccination history of cases. | | | |
|---|---|---|---|---|---|---|
| | | | Number vaccinated within 7 years preceding attack. | Number last vaccinated more than 7 years preceding attack. | Number never successfully vaccinated. | Vaccination history not obtained or uncertain. |
| New Jersey: | | | | | | |
| Burlington County | 3 | | | | 2 | 1 |
| Camden County | 1 | | | | 1 | |
| Cape May County | 6 | | | | 6 | |
| Monmouth County | 1 | | | | 1 | |
| Total | 11 | | | | 10 | 1 |
| Ohio: | | | | | | |
| Ashtabula County | 4 | | | | 4 | |
| Belmont County | 16 | | | | 1 | 15 |
| Brown County | 3 | | | | 1 | 2 |
| Butler County | 30 | | | | 15 | 15 |
| Clark County | 3 | | | | 1 | 2 |
| Coshocton County | 2 | | | | 2 | |
| Cuyahoga County | 40 | | | 3 | 21 | 16 |
| Darke County | 2 | | | | 1 | 1 |
| Erie County | 2 | | | | 1 | 1 |
| Fayette County | 24 | | | | 23 | 1 |
| Franklin County | 25 | | | | 6 | 19 |
| Hamilton County | 26 | | | 2 | 8 | 16 |
| Hancock County | 1 | | | | | 1 |
| Hardin County | 2 | | | | 1 | 1 |
| Highland County | 1 | | | | | 1 |
| Jefferson County | 21 | | 2 | | 13 | 6 |
| Lake County | 1 | | | | | 1 |
| Lawrence County | 11 | | | | 2 | 9 |
| Licking County | 4 | | | | 1 | 3 |
| Lorain County | 27 | | | 1 | 11 | 15 |
| Lucas County | 11 | | | | 11 | |
| Mahoning County | 61 | | | 1 | 40 | 20 |
| Marion County | 31 | | | | 22 | 9 |
| Montgomery County | 3 | | | | 2 | 1 |
| Ottawa County | 1 | | | | | 1 |
| Perry County | 8 | | | | 2 | 6 |
| Ross County | 1 | | | | 1 | |
| Scioto County | 11 | | 1 | | 1 | 9 |
| Seneca County | 6 | | | | 1 | 5 |
| Stark County | 14 | | | 1 | 9 | 4 |
| Summit County | 2 | | | | | 2 |
| Trumbull County | 7 | | | | 1 | 6 |
| Tuscarawas County | 17 | | | | 5 | 12 |
| Union County | 5 | | | | 5 | |
| Warren County | 8 | | 2 | | 6 | |
| Total | 431 | | 5 | 8 | 218 | 200 |

### State Reports for June, 1919.

| Place. | Cases. | Deaths. |
|---|---|---|
| Delaware: | | |
| Sussex County— | | |
| Fairmount | [1]3 | |
| North Carolina: | | |
| Anson County | 4 | |
| Ashe County | 6 | |
| Beaufort County | 6 | |
| Bertie County | 3 | |
| Cabarrus County | 1 | |
| Caswell County | 1 | |
| Chatham County | 1 | |
| Chowan County | 1 | |
| Currituck County | 1 | |
| Dare County | 1 | |
| North Carolina—Continued. | | |
| Davie County | 1 | |
| Durham County | 3 | |
| Edgecombe County | 4 | |
| Forsyth County | 17 | |
| Franklin County | 2 | |
| Gaston County | 1 | |
| Graham County | 2 | |
| Granville County | 1 | |
| Guilford County | 16 | |
| Harnett County | 6 | |
| Iredell County | 1 | |
| Johnson County | 4 | |
| Lenoir County | 1 | |
| Martin County | 2 | |

[1] In same family.

## SMALLPOX—Continued.

### State Reports for June, 1919—Continued.

| Place. | Cases. | Deaths. |
|---|---|---|
| North Carolina—Continued. | | |
| McDowell County | 30 | |
| Montgomery County | 3 | |
| Orange County | 2 | |
| Pasquotank County | 4 | |
| Pitt County | 21 | |
| Robeson County | 5 | |
| Rockingham County | 12 | |
| Rutherford County | 1 | |
| Surry County | 3 | |
| Vance County | 11 | |
| Wake County | 7 | |
| Washington County | 4 | |
| Watauga County | 3 | |
| Wilkes County | 3 | |
| Wilson County | 8 | |
| Yancey County | 2 | |
| Total | 205 | |
| North Dakota: | | |
| Bottineau County— | | |
| Souris | 2 | |
| Foster County— | | |
| Melville | 1 | |
| Morton County— | | |
| St. Joseph | 1 | |
| Mountrail County | 5 | |
| Ward County— | | |
| Minot | 2 | |
| Total | 11 | |
| South Carolina: | | |
| Abbeville County | 3 | |
| Charleston County | 5 | |
| Cherokee County | 8 | |
| Clarendon County | 2 | |
| Edgefield County | 16 | |
| Fairfield County | 1 | |
| Florence County | 12 | |
| Greenville County | 1 | |
| Orangeburg County | 1 | |
| Richland County | 15 | |
| Spartanburg County | 11 | |
| Sumter County | 3 | |
| Williamsburg County | 1 | |
| Total | 79 | |
| Washington: | | |
| Chelan County— | | |
| Wenatchee | 1 | |
| Franklin County | 2 | |
| Pasco | 6 | |
| Grant County— | | |
| Hartline | 2 | |
| Washington—Continued. | | |
| Grays Harbor County— | | |
| Cosmopolis | 1 | |
| Hoquiam | 16 | |
| King County— | | |
| Seattle | 147 | |
| Kitsap County | 1 | |
| Bremerton | 1 | |
| Kittitas County | 4 | |
| Ellensburg | 1 | |
| Lewis County | 2 | |
| Centralia | 2 | |
| Okanogan County | 2 | |
| Pierce County | 21 | |
| Orting | 1 | |
| Puyallup | 10 | |
| Snohomish County | 12 | |
| Everett | 45 | |
| Marysville | 2 | |
| Monroe | 3 | |
| Spokane County | 1 | |
| Deer Park | 1 | |
| Latah | 1 | |
| Spangle | 1 | |
| Spokane | 10 | |
| Thurston County— | | |
| Olympia | 6 | |
| Walla Walla County | 1 | |
| Walla Walla | 9 | |
| Whatcom County | 1 | |
| Bellingham | 4 | |
| Yakima County | 46 | |
| Selah | 2 | |
| Sunnyside | 1 | |
| Toppenish | 1 | |
| Wapato | 5 | |
| Yakima | 26 | |
| Zillah | 5 | |
| Total | 403 | |
| Wyoming: | | |
| Sweetwater County | 34 | |
| Carbon County | 1 | |
| Big Horn County | 7 | |
| Laramie County | 7 | |
| Niobrara County | 7 | |
| Converse County | 2 | |
| Natrona County | 11 | |
| Albany County | 1 | |
| Sheridan County | 3 | |
| Weston County | 3 | |
| Total | 76 | |

### City Reports for Week Ended July 12, 1919.

| Place. | Cases. | Deaths. |
|---|---|---|
| Ann Arbor, Mich | 1 | |
| Atchison, Kans | 1 | |
| Atlanta, Ga | 4 | |
| Birmingham, Ala | 2 | |
| Boise, Idaho | 1 | |
| Chanute, Kans | 2 | |
| Cheyenne, Wyo | 1 | |
| Columbia, S. C | 2 | |
| Columbus, Ga | 2 | |
| Dallas, Tex | 3 | |
| Davenport, Iowa | 1 | |
| Denver, Colo | 12 | |
| Detroit, Mich | 1 | |
| Duluth, Minn | 1 | |
| Eureka, Calif | 2 | |
| Everett, Wash | 4 | |
| Ft. Wayne, Ind | 1 | |
| Ft. Worth, Tex | 2 | |
| Galesburg, Ill | 1 | |
| Grand Rapids, Mich | 1 | |
| Great Falls, Mont | 1 | |
| Harrisburg, Pa | 1 | |
| Hoquiam, Wash | 7 | |
| Indianapolis, Ind | 1 | |
| Kansas City, Mo | 1 | |
| Kokomo, Ind | 4 | |
| Lincoln, Nebr | 5 | |
| Little Rock, Ark | 3 | |

## SMALLPOX—Continued.

### City Reports for Week Ended July 12, 1919—Continued.

| Place. | Cases. | Deaths. | Place. | Cases. | Deaths. |
|---|---|---|---|---|---|
| Logansport, Ind. | 3 | | Racine, Wis. | 2 | |
| Long Beach, Calif. | 2 | | Rock Island, Ill. | 1 | |
| Los Angeles, Calif. | 1 | | St. Cloud, Minn. | 1 | |
| Marinette, Wis. | 1 | | St. Joseph, Mo. | 1 | |
| Marquette, Mich. | 1 | | St. Paul, Minn. | 2 | |
| Milwaukee, Wis. | 10 | | Salt Lake City, Utah. | 1 | |
| Minneapolis, Minn. | 4 | | San Diego, Calif. | 3 | |
| Mobile, Ala. | 2 | | San Francisco, Calif. | 2 | |
| Montgomery, Ala. | 1 | | San Jose, Calif. | 3 | |
| Morgantown, W. Va. | 2 | | Seattle, Wash. | 4 | |
| New Orleans, La. | 1 | 1 | Sioux City, Iowa. | 1 | |
| Norfolk, Va. | 5 | | Spartanburg, S. C. | 1 | |
| Oakland, Calif. | 3 | | Spokane, Wash. | 6 | |
| Ogden, Utah. | 1 | | Stockton, Calif. | 6 | |
| Omaha, Nebr. | 11 | | Superior, Wis. | 2 | |
| Oshkosh, Wis. | 2 | | Tacoma, Wash. | 3 | |
| Philadelphia, Pa. | 1 | | Topeka, Kans. | 2 | |
| Pocatello, Idaho. | 3 | | Wichita, Kans. | 8 | |
| Portland, Oreg. | 50 | | Winston-Salem, N. C. | 1 | |
| Portsmouth, Va. | 1 | | Yakima, Wash. | 2 | |
| Pueblo, Colo. | 4 | | Youngstown, Ohio. | 12 | |

## TETANUS.

### City Reports for Week Ended July 12, 1919.

| Place. | Cases. | Deaths. | Place. | Cases. | Deaths. |
|---|---|---|---|---|---|
| Austin, Tex. | | 1 | Milwaukee, Wis. | | 1 |
| Elgin, Ill. | | 1 | St. Joseph, Mo. | | 1 |
| Kansas City, Mo. | | 1 | St. Louis, Mo. | | 1 |

## TUBERCULOSIS.

See Telegraphic weekly reports from States, p. 1711; and Weekly reports from cities, p. 1728.

## TYPHOID FEVER.

### State Reports for June, 1919.

| Place. | New cases reported. | Place. | New cases reported. |
|---|---|---|---|
| California: | | California—Continued. | |
| Alameda County | 1 | Orange County | 2 |
| Berkeley | 4 | Riverside County | 1 |
| Oakland | 6 | Banning | 1 |
| Butte County | 1 | Riverside | 2 |
| Chico | 1 | Sacramento County | 2 |
| Contra Costa County— | | Sacramento | 3 |
| Richmond | 1 | San Bernardino County— | |
| Fresno County— | | Ontario | 1 |
| Coalinga | 2 | Redlands | 3 |
| Fresno | 1 | San Bernardino | 2 |
| Imperial County | 4 | San Diego County— | |
| Brawley | 12 | San Diego | 3 |
| Calexico | 1 | San Francisco | 4 |
| El Centro | 1 | Santa Clara County | 1 |
| Imperial | 2 | San Jose | 3 |
| Kern County | 5 | Shasta County | 1 |
| Los Angeles County | 1 | Siskiyou County— | |
| Huntington Park | 1 | Doris | 1 |
| Los Angeles | 11 | Sonoma County— | |
| Pasadena | 1 | Santa Rosa | 2 |
| Pomona | 15 | Total | 185 |
| South Pasadena | 1 | | |
| Whittier | 1 | | |

## TYPHOID FEVER—Continued.

### State Reports for June, 1919—Continued.

| Place. | New cases reported. |
|---|---|
| **Connecticut:** | |
| Fairfield County— | |
| Danbury | 1 |
| Stamford | 1 |
| Hartford County— | |
| Hartford | 3 |
| New Britain | 1 |
| Windsor Locks | 2 |
| Middlesex County— | |
| Middletown | 1 |
| New Haven County— | |
| Ansonia | 1 |
| Cheshire | 1 |
| Hamden | 1 |
| New Haven | 4 |
| Waterbury | 2 |
| New London County— | |
| Norwich | 1 |
| Waterford | 3 |
| Windham County— | |
| Willimantic | 1 |
| Total | 23 |
| **Delaware:** | |
| New Castle County— | |
| Wilmington | 1 |
| **Michigan:** | |
| Barry County— | |
| Nashville | 1 |
| Cass County— | |
| Ontwa Township | 1 |
| Crawford County— | |
| Grayling | 1 |
| Genesee County— | |
| Flint | 7 |
| Hillsdale County— | |
| Hillsdale | 1 |
| Huron County— | |
| Bad Axe | 1 |
| Harbor Beach | 1 |
| Ingham County— | |
| Lansing | 2 |
| White Oak Township | 1 |
| Kent County— | |
| Grand Rapids | 1 |
| Lenawee County— | |
| Clinton | 1 |
| Fairfield Township | 1 |
| Macomb County— | |
| Mt. Clemens | 3 |
| Mason County— | |
| Hamlin Township | 1 |
| Montcalm County— | |
| Maple Valley Township | 1 |
| Oakland County— | |
| Troy Township | 1 |
| Ogemaw County— | |
| West Branch | 1 |
| Ottawa County— | |
| Crockery Township | 1 |
| Holland | 1 |
| Roscommon County— | |
| Lake Township | 1 |
| Saginaw County— | |
| Brady Township | 1 |
| Saginaw | 2 |
| St. Clair County— | |
| Marine City | 1 |
| Wales Township | 1 |
| Tuscola County— | |
| Vassar | 1 |
| Van Buren County— | |
| Decatur Township | 1 |
| Washtenaw County— | |
| Ann Arbor | 1 |
| Bridgewater Township | 2 |
| Ypsilanti | 1 |

| Place. | New cases reported. |
|---|---|
| **Michigan—Continued.** | |
| Wayne County— | |
| Detroit | 27 |
| Hamtramck | 1 |
| Highland Park | 1 |
| Livonia Township | 1 |
| River Rouge | 1 |
| Total | 71 |
| **New Jersey:** | |
| Atlantic County | 2 |
| Bergen County | 4 |
| Camden County | 5 |
| Cape May County | 1 |
| Essex County | 4 |
| Gloucester County | 1 |
| Hudson County | 2 |
| Mercer County | 3 |
| Middlesex County | 1 |
| Monmouth County | 1 |
| Morris County | 12 |
| Passaic County | 1 |
| Salem County | 1 |
| Somerset County | 2 |
| Union County | 3 |
| Total | 43 |
| **North Carolina:** | |
| Alamance County | 2 |
| Alexander County | 1 |
| Anson County | 3 |
| Ashe County | 5 |
| Avery County | 2 |
| Beaufort County | 6 |
| Bladen County | 2 |
| Brunswick County | 1 |
| Buncombe County | 3 |
| Cabarrus County | 4 |
| Caldwell County | 8 |
| Caswell County | 4 |
| Catawba County | 10 |
| Chatham County | 1 |
| Cherokee County | 1 |
| Clay County | 3 |
| Cleveland County | 11 |
| Columbus County | 17 |
| Craven County | 6 |
| Cumberland County | 3 |
| Davidson County | 8 |
| Davie County | 3 |
| Duplin County | 4 |
| Durham County | 10 |
| Edgecombe County | 13 |
| Forsyth County | 11 |
| Franklin County | 3 |
| Gaston County | 14 |
| Granville County | 2 |
| Greene County | 2 |
| Guilford County | 31 |
| Halifax County | 4 |
| Harnett County | 1 |
| Haywood County | 1 |
| Henderson County | 2 |
| Hertford County | 3 |
| Iredell County | 6 |
| Jackson County | 4 |
| Johnston County | 7 |
| Lee County | 4 |
| Lenoir County | 7 |
| Lincoln County | 9 |
| Martin County | 11 |
| McDowell County | 2 |
| Mecklenburg County | 2 |
| Mitchell County | 3 |
| Montgomery County | 2 |
| Nash County | 3 |
| New Hanover County | 4 |

## TYPHOID FEVER—Continued.

### State Reports for June, 1919—Continued.

| Place. | New cases reported. |
|---|---|
| North Carolina—Continued. | |
| Onslow County | 10 |
| Pamlico County | 3 |
| Pender County | 6 |
| Person County | 5 |
| Pitt County | 24 |
| Randolph County | 7 |
| Richmond County | 8 |
| Robeson County | 9 |
| Rockingham County | 2 |
| Rowan County | 19 |
| Rutherford County | 9 |
| Sampson County | 1 |
| Scotland County | 4 |
| Stokes County | 2 |
| Surry County | 3 |
| Swain County | 8 |
| Wake County | 7 |
| Warren County | 1 |
| Washington County | 2 |
| Watauga County | 1 |
| Wayne County | 8 |
| Wilkes County | 7 |
| Wilson County | 5 |
| Yadkin County | 11 |
| Total | 431 |
| North Dakota: | |
| Morton County— | |
| Mandan | 2 |
| Ohio: | |
| Adams County | 1 |
| Allen County | 2 |
| Ashtabula County | 1 |
| Auglaize County | 2 |
| Belmont County | 7 |
| Columbiana County | 6 |
| Crawford County | 1 |
| Cuyahoga County | 8 |
| Defiance County | 1 |
| Fairfield County | 1 |
| Franklin County | 4 |
| Fulton County | 3 |
| Guernsey County | 1 |
| Hamilton County | 6 |
| Harrison County | 3 |
| Highland County | 1 |
| Jackson County | 1 |
| Lawrence County | 9 |
| Logan County | 2 |
| Lorain County | 3 |
| Lucas County | 3 |
| Mahoning County | 2 |
| Marion County | 4 |
| Meigs County | 3 |
| Miami County | 2 |
| Montgomery County | 6 |
| Morrow County | 1 |
| Noble County | 1 |
| Pike County | 2 |
| Portage County | 1 |
| Sandusky County | 2 |
| Scioto County | 1 |
| Seneca County | 2 |
| Stark County | 1 |
| Summit County | 3 |
| Trumbull County | 4 |
| Tuscarawas County | 2 |
| Vinton County | 3 |
| Warren County | 1 |
| Washington County | 1 |
| Wood County | 2 |
| Total | 110 |

| Place. | New cases reported. |
|---|---|
| Rhode Island: | |
| Providence County— | |
| Providence | 6 |
| North Providence (town) | 2 |
| Kent County— | |
| West Warwick (town) | 3 |
| Total | 11 |
| South Carolina: | |
| Abbeville County | 9 |
| Aiken County | 3 |
| Anderson County | 3 |
| Barnwell County | 11 |
| Beaufort County | 7 |
| Charleston County | 4 |
| Cherokee County | 4 |
| Chester County | 4 |
| Chesterfield County | 3 |
| Clarendon County | 3 |
| Darlington County | 1 |
| Dillon County | 7 |
| Edgefield County | 3 |
| Fairfield County | 2 |
| Florence County | 6 |
| Greenville County | 7 |
| Greenwood County | 13 |
| Hampton County | 3 |
| Horry County | 3 |
| Kershaw County | 8 |
| Laurens County | 1 |
| Lexington County | 6 |
| Marion County | 6 |
| Marlboro County | 4 |
| Newberry County | 8 |
| Oconee County | 4 |
| Orangeburg County | 9 |
| Richland County | 16 |
| Spartanburg County | 7 |
| Sumter County | 21 |
| Union County | 2 |
| York County | 2 |
| Total | 190 |
| Washington: | |
| Benton County— | |
| Prosser | 1 |
| Chelan County— | 2 |
| Cowlitz County— | |
| Woodland | 1 |
| Ferry County | 1 |
| Republic | 1 |
| Franklin County | 2 |
| Pasco | 2 |
| Kittitas County | 2 |
| Pacific County— | |
| Ilwaco | 1 |
| South Bend | 1 |
| Pierce County | 1 |
| Steilacoom | 2 |
| Snohomish County— | |
| Everett | 1 |
| Spokane County— | |
| Spokane | 2 |
| Walla Walla County | 2 |
| Yakima County | 2 |
| Wapato | 1 |
| Yakima | 2 |
| Total | 27 |
| Wyoming: | |
| Washakie County | 1 |

## TYPHOID FEVER—Continued.

### City Reports for Week Ended July 12, 1919.

| Place. | Cases. | Deaths. | Place. | Cases. | Deaths. |
|---|---|---|---|---|---|
| Akron, Ohio | 7 | | Monessen, Pa | 1 | |
| Allentown, Pa | 1 | | Montgomery, Ala | | 1 |
| Anderson, Ind | | 1 | Morristown, N. J | 3 | 1 |
| Arlington, Mass | 1 | | Moundsville, W. Va | 1 | 1 |
| Atlanta, Ga | 4 | | Muscatine, Iowa | 2 | |
| Atlantic City, N. J | 1 | | Nashville, Tenn | 7 | |
| Baltimore, Md | 6 | 1 | New Haven, Conn | 3 | |
| Berkeley, Calif | | 2 | New London, Conn | 1 | |
| Birmingham, Ala | 5 | 1 | New Orleans, La | 3 | 2 |
| Bluefield, W. Va | 1 | | Newport News, Va | 1 | 1 |
| Buffalo, N. Y | | 2 | New York, N. Y | 29 | 8 |
| Centralia, Ill | 1 | | Norfolk, Va | 4 | |
| Charleston, S. C | 2 | | North Tonawanda, N. Y | 2 | |
| Charleston, W. Va | 4 | 2 | Norwalk, Conn | 2 | |
| Chicago, Ill | 8 | 1 | Oakland, Calif | 2 | 1 |
| Cleveland, Ohio | 4 | | Oklahoma City, Okla | | 1 |
| Columbia, S. C | 2 | | Paterson, N. J | 1 | |
| Columbus, Ga | 4 | | Philadelphia, Pa | 17 | 2 |
| Connellsville, Pa | 1 | | Pittsburgh, Pa | 3 | |
| Dallas, Tex | 3 | | Port Chester, N. Y | 2 | |
| Danville, Va | 1 | | Portland, Me | 1 | |
| Detroit, Mich | 12 | 2 | Portsmouth, Va | 1 | |
| Durham, N. C | 4 | | Poughkeepsie, N. Y | 2 | |
| East St. Louis, Ill | 1 | | Providence, R. I | 2 | 1 |
| Elmira, N. Y | 2 | | Pueblo, Colo | 1 | |
| El Paso, Tex | 4 | | Reading, Pa | 1 | |
| Evanston, Ill | 1 | | Red Wing, Minn | 1 | |
| Everett, Wash | 2 | | Richmond, Va | 5 | |
| Fairmont, W. Va | 1 | | Roanoke, Va | 2 | 1 |
| Fall River, Mass | 3 | | Rochester, N. Y | 5 | |
| Flint, Mich | 9 | | Rockford, Ill | 1 | |
| Fort Worth, Tex | 2 | | St. Louis, Mo | 4 | 1 |
| Fostoria, Ohio | 1 | | St. Paul, Minn | 1 | |
| Galveston, Tex | 2 | | San Diego, Calif | 1 | 1 |
| Grand Rapids, Mich | 1 | 1 | San Francisco, Calif | 2 | |
| Harrisburg, Pa | 2 | | Saratoga Springs, N. Y | 1 | |
| Haverhill, Mass | 1 | | Sault Ste. Marie, Mich | 1 | |
| Highland Park, Mich | 2 | | Savannah, Ga | 1 | |
| Houston, Tex | 1 | | Scranton, Pa | 2 | |
| Hutchinson, Kans | 4 | | Springfield, Ill | 1 | 1 |
| Indianapolis, Ind | 2 | | Springfield, Ohio | 1 | |
| Ironwood, Mich | 1 | 1 | Syracuse, N. Y | 1 | 1 |
| Jersey City, N. J | 2 | | Terre Haute, Ind | 1 | |
| Kansas City, Mo | 1 | | Toledo, Ohio | 1 | |
| Lancaster, Ohio | 1 | | Topeka, Kans | 3 | |
| Los Angeles, Calif | 5 | 1 | Tulsa, Okla | 8 | |
| Louisville, Ky | 7 | | Waco, Tex | | 2 |
| Lynchburg, Va | 2 | | Washington, D. C | 3 | |
| Lynn, Mass | 3 | 1 | Wheeling, W. Va | 4 | 1 |
| McKees Rocks, Pa | 1 | | Wichita, Kans | 1 | |
| Malden, Mass | 2 | | Wilmington, Del | 1 | 1 |
| Martinsburg, W. Va | 1 | | Winston-Salem, N. C | 4 | 1 |
| Memphis, Tenn | 3 | | Worcester, Mass | 2 | |
| Milwaukee, Wis | 2 | | York, Pa | 1 | |
| Minneapolis, Minn | 2 | | Youngstown, Ohio | | 1 |
| Mobile, Ala | 2 | 3 | Zanesville, Ohio | 1 | 1 |

## DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

### City Reports for Week Ended July 12, 1919.

| City. | Population as of July 1, 1917 (estimated by U. S. Census Bureau). | Total deaths from all causes. | Diphtheria. | | Measles. | | Scarlet fever. | | Tuberculosis. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. |
| Adams, Mass. | 14,406 | 2 | | | | | | | | |
| Adrian, Mich. | 11,570 | 2 | | | | | | | | |
| Akron, Ohio | 93,604 | 36 | 6 | | 5 | | 3 | | 9 | |
| Alameda, Calif. | 28,433 | 6 | 4 | 1 | | | 5 | | | |
| Alexandria, La. | 16,232 | 6 | | | | | | | | 2 |
| Allentown, Pa. | 65,109 | | 1 | | 3 | | | | | |
| Alton, Ill. | 23,783 | | | | | | 2 | | | |
| Altoona, Pa. | 50,712 | | 6 | | | | 1 | | 1 | |
| Anderson, Ind. | 24,230 | 8 | | | | | | | | 2 |
| Ann Arbor, Mich. | 15,041 | 10 | 1 | | | | 1 | | 2 | |
| Anniston, Ala. | 14,326 | | 1 | | | | | | 1 | |
| Ansonia, Conn. | 16,954 | 3 | | | | | | | | |
| Appleton, Wis. | 18,005 | 2 | | | | | | | | |
| Arlington, Mass. | 13,073 | 11 | 1 | | | | | | | |
| Asbury Park, N. J. | 14,629 | 3 | 1 | | | | | | | |
| Asheville, N. C. | 25,656 | 15 | | | | | | | 12 | 6 |
| Ashtabula, Ohio | 22,008 | 3 | | | | | 4 | | 1 | |
| Atlanta, Ga. | 196,144 | 63 | 3 | 1 | 1 | | 3 | | 1 | 4 |
| Atlantic City, N. J. | 59,515 | 12 | 1 | 1 | 10 | | | | 3 | |
| Attleboro, Mass. | 19,776 | 2 | | | | | | | 2 | |
| Auburn, N. Y. | 37,823 | 6 | | | 2 | | | | | |
| Austin, Tex. | 35,612 | 4 | | | | | | | | 1 |
| Bakersfield, Calif. | 17,543 | 2 | | | | | | | 1 | |
| Baltimore, Md. | 504,637 | 274 | 16 | 3 | 5 | | 19 | | 36 | 25 |
| Baton Rouge, La. | 17,544 | 5 | | | | | | | 2 | 2 |
| Battle Creek, Mich. | 30,159 | | 4 | | 2 | | 1 | | | |
| Bayonne, N. J. | 72,204 | | | | | | 1 | | 8 | |
| Beatrice, Nebr. | 10,437 | 4 | | | | | | | | 1 |
| Bedford, Ind. | 10,613 | 2 | | | | | | | | |
| Belleville, N. J. | 12,797 | | | | | | | | 1 | |
| Beloit, Wis. | 18,547 | 5 | | | | | | | | |
| Benton Harbor, Mich. | 11,099 | | | | 2 | | | | | |
| Berkeley, Calif. | 60,427 | 9 | | | | | | | | 2 |
| Berlin, N. H. | 13,892 | 5 | | | | | | | | 1 |
| Bethlehem, Pa. | 14,353 | | 1 | | 13 | | | | | |
| Beverly, Mass. | 22,128 | 4 | 1 | | | | | | 1 | 1 |
| Biddeford, Me. | 17,760 | 2 | | | | | | | | |
| Binghampton, N. Y. | 54,864 | 14 | 1 | | 1 | | 1 | 1 | | |
| Birmingham, Ala. | 189,716 | 74 | 1 | | 6 | | 3 | | 10 | 12 |
| Bloomington, Ind. | 11,661 | 2 | | | | | | | | |
| Boise, Idaho | 35,951 | 7 | | | | | 3 | | | |
| Boston, Mass. | 767,815 | 218 | 41 | 4 | 24 | 1 | 22 | | 30 | 28 |
| Braddock, Pa. | 32,060 | | 2 | | | | | | | |
| Brazil, Ind. | 10,472 | 5 | | | | | | | | |
| Bridgeport, Conn. | 124,724 | 16 | 1 | | 12 | | 1 | | 2 | 2 |
| Bristol, Conn. | 16,318 | 1 | | | | | | | | |
| Brockton, Mass. | 69,152 | 15 | | | 1 | | | | 3 | 1 |
| Brookline, Mass. | 33,526 | 6 | | | 4 | | 1 | | | 3 |
| Buffalo, N. Y. | 475,781 | 109 | 42 | 3 | 25 | | 6 | | 41 | 13 |
| Burlington, Iowa. | 25,144 | 2 | | | | | 1 | | | |
| Burlington, Vt. | 21,802 | 10 | | | 1 | | | | | 1 |
| Butler, Pa. | 28,677 | | 2 | | 1 | | | | | |
| Butte, Mont. | 44,057 | | 1 | | 3 | | 3 | | | |
| Cadillac, Mich. | 10,158 | 3 | | | | | | | | |
| Cairo, Ill. | 15,995 | 6 | | | 2 | | | | | 1 |
| Cambridge, Mass. | 114,293 | 27 | 1 | | 5 | | 5 | | 9 | 4 |
| Camden, N. J. | 108,117 | | 1 | | | | 1 | | 4 | |
| Canton, Ohio | 62,566 | 14 | | | | | 1 | | 3 | 2 |
| Cape Girardeau, Mo. | 11,146 | | 3 | | | | | | | |
| Carbondale, Pa. | 19,597 | | 1 | | | | | | | |
| Carlisle, Pa. | 10,795 | | | | 3 | | | | | |
| Cedar Rapids, Iowa. | 38,033 | | 1 | | | | | | | |
| Centralia, Ill. | 11,838 | 3 | | | | | | | | |
| Chambersburg, Pa. | 12,475 | | | | 2 | | | | | |
| Chanute, Kans. | 12,968 | 2 | | | | | 1 | | | |
| Charleston, S. C. | 61,041 | 23 | | | | | | | 1 | 4 |
| Charleston, W. Va. | 31,060 | 11 | | | | | | | | 1 |
| Charlotte, N. C. | 40,759 | 11 | | | 1 | | 1 | | 1 | |
| Chelsea, Mass. | 48,405 | 6 | | | | | | | 2 | 2 |
| Chester, Pa. | 41,857 | | 3 | | 2 | | | | 4 | |
| Chicago, Ill. | 2,547,201 | 517 | 89 | 11 | 211 | 4 | 20 | | 427 | 72 |
| Chicopee, Mass. | 29,950 | 6 | | | | | | | | 1 |
| Chillicothe, Ohio | 15,625 | 4 | | | | | | | | |
| Cincinnati, Ohio | 414,218 | 107 | 7 | 1 | 54 | 1 | 13 | | 28 | 12 |

## DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

### City Reports for Week Ended July 12, 1919—Continued.

| City. | Population as of July 1, 1917 (estimated by U. S. Census Bureau). | Total deaths from all causes. | Diphtheria. | | Measles. | | Scarlet fever. | | Tuberculosis. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. |
| Cleveland, Ohio | 692,259 | 143 | 29 | 1 | 27 | ..... | 1 | ..... | 35 | 20 |
| Clinton, Mass | [1] 13,075 | 3 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Cohoes, N. Y | 25,292 | 7 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1 |
| Colorado Springs, Colo | 38,965 | 12 | ..... | ..... | ..... | ..... | ..... | ..... | 12 | 4 |
| Columbia, S. C | 35,165 | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Columbus, Ga | 26,306 | 12 | 1 | ..... | 5 | ..... | ..... | ..... | 2 | 1 |
| Columbus, Ohio | 220,135 | 60 | 1 | ..... | 8 | ..... | 1 | ..... | 4 | 4 |
| Concord, N. H | 22,858 | 9 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1 |
| Corpus Christi, Tex | 10,789 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1 | ..... |
| Council Bluffs, Iowa | 31,838 | 5 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Covington, Ky | 59,623 | 15 | 1 | ..... | ..... | ..... | ..... | ..... | ..... | 3 |
| Cranston, R. I | 26,773 | 3 | ..... | ..... | ..... | ..... | ..... | ..... | 1 | 1 |
| Cumberland, Md | 26,686 | 8 | ..... | ..... | 1 | ..... | 3 | ..... | 1 | 1 |
| Dallas, Tex | 129,738 | 36 | 1 | ..... | ..... | ..... | ..... | ..... | 1 | 4 |
| Danbury, Conn | 22,931 | 4 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Danvers, Mass | 10,037 | ..... | 2 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Danville, Ill | 32,969 | 2 | ..... | ..... | 1 | ..... | ..... | ..... | 1 | 1 |
| Danville, Va | 20,183 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 2 |
| Davenport, Iowa | 49,618 | ..... | 4 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Dayton, Ohio | 128,939 | 33 | 4 | ..... | 13 | ..... | 1 | ..... | 7 | 2 |
| Decatur, Ill | 41,483 | 6 | 1 | ..... | 1 | ..... | ..... | ..... | 1 | ..... |
| Dedham, Mass | 10,618 | 3 | 2 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Denver, Colo | 268,439 | 62 | 6 | 1 | 22 | ..... | 4 | ..... | ..... | 12 |
| Des Moines, Iowa | 104,052 | ..... | ..... | ..... | ..... | ..... | 1 | ..... | ..... | ..... |
| Detroit, Mich | 619,648 | 164 | 29 | 2 | 68 | 1 | 20 | 2 | 48 | 21 |
| Dover, N. H | 13,276 | 4 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Du bois, Pa | 14,994 | ..... | ..... | ..... | ..... | ..... | 8 | ..... | ..... | ..... |
| Duluth, Minn | 97,077 | 17 | 3 | ..... | 3 | ..... | 1 | ..... | 4 | 2 |
| Durham, N. C | 26,160 | 5 | ..... | ..... | ..... | ..... | ..... | ..... | 2 | 1 |
| East Chicago, Ind | 30,286 | 9 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1 |
| Easton, Pa | 30,854 | ..... | 1 | ..... | ..... | ..... | ..... | ..... | 1 | ..... |
| East Orange, N. J | 43,761 | 9 | 1 | ..... | 1 | ..... | 1 | ..... | 2 | 2 |
| East St. Louis, Ill | 77,312 | 8 | 1 | ..... | 5 | ..... | 1 | ..... | 1 | 1 |
| Elgin, Ill | 28,562 | 6 | ..... | ..... | 4 | ..... | ..... | ..... | ..... | 1 |
| Elizabeth, N. J | 88,830 | ..... | 2 | ..... | ..... | ..... | 2 | ..... | 4 | 1 |
| Elmira, N. Y | 38,272 | 10 | 1 | ..... | ..... | ..... | ..... | ..... | 1 | ..... |
| El Paso, Tex | 69,149 | 30 | ..... | ..... | ..... | ..... | 5 | 1 | ..... | 7 |
| Englewood, N. J | 12,603 | 2 | ..... | ..... | ..... | ..... | 2 | ..... | ..... | ..... |
| Erie, Pa | 76,592 | ..... | 4 | ..... | ..... | ..... | ..... | ..... | 10 | ..... |
| Eureka, Calif | 15,142 | 3 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Evanston, Ill | 29,304 | 11 | ..... | ..... | 2 | ..... | ..... | ..... | ..... | ..... |
| Everett, Mass | 40,160 | 8 | 2 | ..... | ..... | ..... | ..... | ..... | 3 | ..... |
| Everett, Wash | 37,205 | ..... | ..... | ..... | ..... | ..... | 3 | ..... | ..... | ..... |
| Fairmount, W. Va | 16,111 | ..... | 1 | ..... | 3 | ..... | ..... | ..... | ..... | ..... |
| Fall River, Mass | 129,828 | 34 | 3 | ..... | 15 | ..... | 4 | ..... | 4 | 2 |
| Fargo, N. Dak | 17,872 | 2 | ..... | ..... | 10 | ..... | 1 | ..... | 2 | ..... |
| Farrell, Pa | 10,190 | ..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Findlay, Ohio | 14,858 | 1 | ..... | ..... | 2 | ..... | ..... | ..... | ..... | ..... |
| Flint, Mich | 57,386 | 3 | 13 | ..... | 9 | ..... | ..... | ..... | ..... | ..... |
| Fond du Lac, Wis | 21,486 | 4 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1 |
| Fort Dodge, Iowa | 21,039 | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1 |
| Fort Scott, Kans | 10,564 | 5 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Fort Wayne, Ind | 78,014 | 19 | ..... | ..... | ..... | ..... | 1 | ..... | 5 | 2 |
| Fort Worth, Tex | 109,597 | 16 | 3 | 1 | 2 | ..... | ..... | ..... | 2 | 2 |
| Fostoria, Ohio | 10,959 | 3 | ..... | ..... | 2 | ..... | ..... | ..... | ..... | ..... |
| Framingham, Mass | 14,149 | 10 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1 |
| Freeport, Ill | 19,844 | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Fremont, Nebr | 10,080 | 4 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Fremont, Ohio | 11,034 | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Fresno, Calif | 36,314 | 4 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Galesburg, Ill | 24,629 | 11 | ..... | ..... | 3 | ..... | ..... | ..... | ..... | ..... |
| Galveston, Tex | 42,650 | 12 | ..... | ..... | ..... | ..... | ..... | ..... | 1 | ..... |
| Gloversville, N. Y | 22,314 | ..... | ..... | ..... | 18 | ..... | ..... | ..... | ..... | ..... |
| Grand Rapids, Mich | 132,861 | 29 | 2 | ..... | 6 | ..... | ..... | ..... | ..... | 2 |
| Great Falls, Mont | [1] 13,948 | 10 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1 |
| Green Bay, Wis | 30,017 | 10 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Greenfield, Mass | 12,251 | 3 | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Greensboro, N. C | 20,171 | 6 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Greenville, S. C | 18,574 | 4 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Greenwich, Conn | 19,594 | ..... | 1 | ..... | ..... | ..... | 1 | ..... | 2 | 1 |
| Hackensack, N. J | 17,412 | 11 | ..... | ..... | 1 | ..... | ..... | ..... | 2 | ..... |
| Hancock, Mich | 12,578 | 5 | ..... | ..... | ..... | ..... | ..... | ..... | 1 | 1 |

[1] Population Apr. 15, 1910.

## DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

### City Reports for Week Ended July 12, 1919—Continued.

| City. | Population as of July 1, 1917 (estimated by U. S. Census Bureau). | Total deaths from all causes. | Diphtheria. | | Measles. | | Scarlet fever. | | Tuberculosis. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. |
| Harrisburg, Pa. | 73,276 | | | | 5 | | | | | |
| Harrison, N. J. | 17,345 | | | | | | 1 | | 1 | |
| Hartford, Conn. | 112,831 | 29 | 1 | | 1 | | 3 | | | 2 |
| Haverhill, Mass. | 49,180 | 9 | 11 | 1 | 1 | | | | 1 | 1 |
| Hazleton, Pa. | 28,981 | | | | 1 | | | | | |
| Highland Park, Mich. | 33,859 | 5 | 8 | 1 | 5 | | 1 | | 3 | |
| Hoboken, N. J. | 78,324 | 12 | 5 | | 2 | | | | 2 | 1 |
| Holland, Mich. | 12,459 | 2 | | | | | | | | 1 |
| Holyoke, Mass. | 66,503 | 10 | | | | | 1 | | 3 | 1 |
| Houston, Tex. | 116,878 | 34 | 4 | | 1 | | 1 | | | |
| Hudson, N. Y. | 12,898 | 3 | | | | | | | | |
| Hutchinson, Kans. | 21,461 | | 1 | | | | | | | |
| Independence, Mo. | 11,964 | 9 | | | | | | | 1 | 1 |
| Indianapolis, Ind. | 283,622 | 80 | 4 | | 10 | | | | 9 | 3 |
| Iowa City, Iowa. | 11,626 | | | | | | | | 1 | |
| Ironwood, Mich. | 15,095 | 8 | | | | | | | 6 | 3 |
| Ithaca, N. Y. | 16,017 | 3 | | | | | | | 1 | |
| Jamestown, N. Y. | 37,431 | 12 | | | 19 | | | | 1 | 3 |
| Janesville, Wis. | 14,411 | 9 | | | | | | | | 1 |
| Jersey City, N. J. | 312,557 | | 24 | 2 | 7 | | 1 | | 15 | 6 |
| Johnstown, N. Y. | 10,678 | 1 | | | | | | | | |
| Johnstown, Pa. | 70,473 | | 2 | | 7 | | | | | |
| Joplin, Mo. | 33,400 | 5 | | | | | | | 2 | |
| Kalamazoo, Mich. | 50,408 | 20 | 1 | | 10 | | 9 | | 4 | 3 |
| Kansas City, Kans. | 102,096 | | | | 2 | | | | 2 | |
| Kansas City, Mo. | 305,816 | 89 | 2 | | 11 | | | | 4 | 5 |
| Kearny, N. J. | 24,325 | 9 | 1 | | | | 1 | | | |
| Kenosha, Wis. | 32,833 | 4 | | | 2 | | 3 | | 1 | |
| Knoxville, Tenn. | 59,112 | | | | | | 1 | | 4 | 4 |
| Kokomo, Ind. | 21,929 | 4 | | | | | 1 | | | 2 |
| Lackawanna, N. Y. | 16,219 | 2 | | | | | | | | |
| La Crosse, Wis. | 31,835 | 7 | | 1 | | | 2 | | 1 | |
| La Fayette, Ind. | 21,481 | 10 | | | | | | | | |
| Lakewood, Ohio. | 23,813 | 4 | 1 | | | | | | | |
| Lancaster, Ohio. | 16,086 | 6 | | | | | | | | 1 |
| Lancaster, Pa. | 51,437 | | 2 | | 1 | | | | | |
| Lawrence, Kans. | 13,477 | 3 | | | | | | | | |
| Lawrence, Mass. | 102,923 | 12 | 2 | | | | 1 | | 1 | 1 |
| Lebanon, Pa. | 20,947 | | 3 | | | | 1 | | 3 | |
| Leominster, Mass. | 21,365 | 5 | 1 | | 3 | | | | | |
| Lexington, Ky. | 41,997 | 24 | | | | | | | | 2 |
| Lincoln, Nebr. | 46,957 | 9 | | | 1 | | | | 1 | 2 |
| Lincoln, R. I. | 10,473 | | 1 | | | | 1 | | | |
| Little Rock, Ark. | 58,716 | 5 | | | | | | | | 1 |
| Logansport, Ind. | 21,338 | 3 | 1 | | 1 | | | | | |
| Long Beach, Calif. | 29,163 | 13 | 1 | | | | | | 1 | |
| Long Branch, N. J. | 15,733 | 2 | | | | | | | 2 | |
| Lorain, Ohio. | 38,266 | 4 | | | | | | | | |
| Los Angeles, Calif. | 535,485 | 121 | 12 | | 7 | | 2 | | 37 | 22 |
| Louisville, Ky. | 240,808 | 85 | 2 | | | | 2 | | 6 | 10 |
| Ludington, Mich. | 10,566 | 5 | | | 2 | | | | | |
| Lynchburg, Va. | 33,497 | 9 | | | | | 2 | | | |
| Lynn, Mass. | 104,534 | 16 | 2 | | 3 | | 3 | | 3 | 3 |
| McKees Rocks, Pa. | 20,795 | | 4 | | | | | | 1 | |
| Macon, Ga. | 46,099 | 17 | | | | | | | | |
| Madison, Wis. | 31,315 | 5 | | | 1 | | | | | 1 |
| Malden, Mass. | 52,243 | 4 | | | | | 3 | | 2 | |
| Manchester, Conn. | 15,859 | 3 | | | | | | | | |
| Manchester, N. H. | 79,607 | 17 | 2 | | | | | | 2 | 2 |
| Manitowoc, Wis. | 13,931 | 4 | | | | | 2 | | | |
| Mankato, Minn. | [1] 10,365 | | | | | | 1 | | | |
| Marinette, Wis. | [1] 14,610 | 3 | | | | | | | | |
| Marion, Ind. | 19,923 | 10 | 2 | 2 | | | 1 | | | |
| Marlboro, Mass. | 15,285 | 3 | | | | | | | 1 | |
| Marquette, Mich. | 12,555 | 3 | 2 | | 4 | | | | | 1 |
| Martinsburg, W. Va. | 12,984 | | | | | | 2 | | | |
| Medford, Mass. | 26,681 | 6 | | | | | 1 | | | |
| Melrose, Mass. | 17,724 | 4 | 1 | | | | | | | |
| Memphis, Tenn. | 151,877 | | 2 | | 2 | | | | 10 | 2 |
| Methuen, Mass. | 14,320 | 2 | | | | | | | | |
| Middletown, Ohio. | 16,384 | 5 | | | | | | | 2 | 1 |
| Milwaukee, Wis. | 445,008 | 86 | 10 | | 2 | | 18 | | 19 | 9 |
| Minneapolis, Minn. | 373,448 | 81 | 9 | 1 | 16 | 1 | 6 | | 20 | 11 |
| Missoula, Mont. | 19,075 | 4 | | | | | 10 | | | |

## DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

### City Reports for Week Ended July 12, 1919—Continued.

| City. | Population as of July 1, 1917 (estimated by U. S. Census Bureau). | Total deaths from all causes. | Diphtheria. | | Measles. | | Scarlet fever. | | Tuberculosis. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. |
| Mobile, Ala. | 59,201 | 28 | | | | | | | 1 | 2 |
| Moline, Ill. | 27,976 | 1 | | | | | | | 2 | 1 |
| Monessen, Pa. | 23,070 | | 1 | | | | 1 | | | |
| Montgomery, Ala. | 44,039 | 13 | | | | | | | 1 | |
| Morgantown, W. Va. | 14,444 | 2 | | | | | | | 1 | |
| Morristown, N. J. | 13,410 | 3 | | | | | | | | |
| Moundsville, W. Va. | 11,513 | 3 | | | | | | | | |
| Mount Carmel, Pa. | 20,709 | | 2 | | 5 | | | | 3 | |
| Mount Vernon, N. Y. | 37,991 | 10 | 2 | | | | 3 | | | |
| Nashua, N. H. | 27,541 | 4 | | | | | | | | |
| Nashville, Tenn. | 118,136 | 37 | 2 | | 4 | | | | 4 | 4 |
| Natick, Mass. | 10,140 | | | | | | | | 1 | 1 |
| Newark, N. J. | 418,789 | 70 | 19 | | 3 | 1 | 8 | | 44 | 5 |
| New Bedford, Mass. | 121,622 | | 4 | | 4 | | 2 | | 5 | |
| New Britain, Conn. | 55,385 | 12 | 4 | 1 | 2 | | 1 | | | |
| Newburgh, N. Y. | 29,893 | 11 | | | | | | | 1 | 2 |
| Newburyport, Mass. | 15,291 | 1 | | | | | | | | |
| New Castle, Pa. | 41,915 | | | | | | 1 | | 5 | |
| New Haven, Conn. | 152,275 | 29 | | | 2 | | 1 | | 8 | 2 |
| New London, Conn. | 21,199 | 7 | 2 | | | | 1 | | 1 | |
| New Orleans, La. | 377,010 | 140 | 9 | | | | | | 23 | 13 |
| Newport News, Va. | 22,622 | 9 | | | 2 | | | | 1 | 1 |
| Newport, R. I. | 30,585 | 7 | 1 | | | | 1 | | | |
| Newton, Mass. | 44,345 | 15 | | | | | | | | |
| New York, N. Y. | 5,737,492 | 1,267 | 203 | 16 | 85 | 4 | 31 | 3 | 188 | 148 |
| Niagara Falls, N. Y. | 38,466 | 7 | 1 | | 34 | | | | 4 | |
| Norfolk, Va. | 91,148 | | 1 | | | | | | | |
| Norristown, Pa. | 31,909 | | | | 1 | | 2 | | | |
| North Adams, Mass. | [1] 22,019 | 3 | | | | | | | 1 | |
| Northampton, Mass. | 20,006 | 7 | | | | | 2 | | | |
| North Attleboro, Mass. | 11,248 | 5 | | | | | 1 | | 1 | 1 |
| North Braddock, Pa. | 15,684 | | 1 | | | | | | | |
| North Tonowanda, N. Y. | 14,060 | 2 | | | 2 | | | | | |
| Norwalk, Conn. | 27,332 | | | | | | 1 | | | |
| Norwich, Conn. | 21,923 | | | | | | | | 1 | |
| Norwood, Ohio | 23,269 | 2 | | | 1 | | | | | |
| Oakland, Calif. | 206,405 | 60 | | 1 | | | 4 | | 7 | 8 |
| Oak Park, Ill. | 27,816 | 7 | | | 10 | | 1 | | 1 | |
| Ogden, Utah. | 32,343 | 2 | | | | | | | | |
| Oil City, Pa. | 20,162 | | 2 | | 15 | | 1 | | | |
| Oklahoma City, Okla. | 97,588 | 17 | | | | | 1 | | 1 | 3 |
| Olean, N. Y. | 16,927 | 7 | | | | | | | | |
| Omaha, Nebr. | 177,777 | 31 | 7 | | 4 | | 1 | | | 5 |
| Orange, N. J. | 33,636 | 17 | 2 | | | | | | 1 | 1 |
| Oshkosh, Wis. | 36,549 | 3 | 2 | | | | 1 | | | |
| Parkersburg, W. Va. | 21,059 | 5 | | | 1 | | | | 1 | |
| Parsons, Kans. | 15,952 | | | | | | | | 1 | |
| Pasadena, Calif. | 49,620 | 11 | | | 1 | | | | 1 | 1 |
| Passaic, N. J. | 74,478 | 10 | 3 | 1 | | | 1 | | 3 | 1 |
| Paterson, N. J. | 140,512 | | 3 | | | | 2 | | 9 | |
| Peekskill, N. Y. | 19,034 | 2 | | | | | | | | |
| Peoria, Ill. | 72,184 | 19 | 2 | | | | 2 | | | 2 |
| Perth Amboy, N. J. | 42,646 | 8 | 2 | | | | | | 3 | 1 |
| Philadelphia, Pa. | 1,735,514 | 528 | 67 | 9 | 99 | 1 | 22 | 1 | 133 | 65 |
| Phillipsburg, N. J. | 15,879 | 4 | 1 | | | | | | | |
| Pine Bluff, Ark. | 17,777 | | 1 | | | | | | | |
| Piqua, Ohio | 14,275 | 5 | | | | | | | | |
| Pittsburgh, Pa. | 586,196 | | 20 | | 8 | | 2 | | 24 | |
| Pittsfield, Mass. | 39,678 | 13 | | | | | 4 | | 1 | 2 |
| Plainfield, N. J. | 24,330 | 2 | | | 16 | | | | | |
| Plattsburg, N. Y. | 13,111 | 3 | 2 | | | | | | | |
| Pomona, Calif. | 13,624 | 7 | 3 | 1 | | | | | | |
| Pontiac, Mich. | 18,006 | 13 | 2 | | 8 | | | | 3 | 1 |
| Port Chester, N. Y. | 16,727 | 4 | | | | | | | 1 | |
| Portland, Me. | 64,720 | 22 | | | | | 9 | | | |
| Portland, Oreg. | 308,399 | 58 | 2 | 1 | | | 5 | | 5 | 5 |
| Portsmouth, N. H. | 11,730 | | | | | | | | 1 | |
| Portsmouth, Va. | 40,693 | 24 | 1 | | | | | | 1 | |
| Pottstown, Pa. | 16,987 | | | | 2 | | 1 | | | |
| Poughkeepsie, N. Y. | 30,786 | 8 | 1 | | | | | | 4 | |
| Providence, R. I. | 259,895 | 52 | 12 | 1 | 2 | | 2 | | | 4 |
| Pueblo, Colo. | 56,084 | | | | 1 | | | | | |

[1] Population Apr. 15, 1910.

## DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

### City Reports for Week Ended July 12, 1919—Continued.

| City. | Population as of July 1, 1917 (estimated by U. S. Census Bureau). | Total deaths from all causes. | Diphtheria. | | Measles. | | Scarlet fever. | | Tuberculosis. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. |
| Quincy, Mass | 39,022 | 6 | 3 | | 1 | | | | | 1 |
| Racine, Wis | 47,465 | 14 | | | 1 | | | | | |
| Rahway, N. J | 10,361 | 3 | | | | | | | | |
| Raleigh, N. C | 20,274 | 6 | | | | | | | | 1 |
| Reading, Pa | 111,607 | | | | 1 | | | | | |
| Redlands, Calif | 14,573 | 5 | | | | | | | | 1 |
| Reno, Nev | 15,514 | 7 | | | | | | | | 3 |
| Richmond, Va | 158,702 | 56 | 2 | | 5 | | 3 | | 20 | 4 |
| Riverside, Calif | 20,496 | 5 | 1 | | | | | | 2 | |
| Roanoke, Va | 46,282 | 13 | 3 | | 4 | | | | 1 | |
| Rochester, N. Y | 264,714 | 51 | 11 | 1 | 2 | 1 | 8 | | 11 | 3 |
| Rockford, Ill | 56,739 | 10 | | | | | | | 1 | |
| Rock Island, Ill | 29,452 | 11 | | | 1 | | | | 1 | 1 |
| Rocky Mount, N. C | 12,673 | 2 | 2 | | | | 1 | | | |
| Rome, N. Y | 24,259 | | 2 | | 6 | | | | 4 | |
| Rutland, Vt | 15,038 | 6 | | | | | | | | |
| Sacramento, Calif | 68,984 | 18 | | | | | | | | 1 |
| St. Cloud, Minn | 12,013 | | | | | | | | 1 | |
| St. Joseph, Mo | 86,498 | 18 | | | | | 1 | | | 3 |
| St. Louis, Mo | 768,630 | 206 | 37 | 4 | 56 | | 8 | | 40 | 18 |
| St. Paul, Minn | 252,465 | 43 | 13 | 1 | 11 | 1 | 3 | 1 | 24 | 2 |
| Salem, Mass | 49,346 | 7 | 3 | | | | 1 | | 5 | |
| Salem, Oreg | 21,274 | 3 | | | | | | | | |
| Salt Lake City, Utah | 121,623 | 28 | 8 | | | | 1 | 1 | | |
| San Diego, Calif | 56,412 | 13 | | | | | | | 9 | 1 |
| Sandusky, Ohio | 20,226 | 7 | | | 1 | | | | 1 | 3 |
| Sanford, Me | 11,217 | 2 | | | | | | | | |
| San Francisco, Calif | 471,023 | 113 | 7 | 1 | 2 | | 6 | | 15 | 10 |
| San Jose, Calif | 39,810 | | | | | | 4 | | 1 | |
| Santa Barbara, Calif | 15,360 | 3 | | | | | | | | |
| Santa Cruz, Calif | 15,150 | 3 | | | | | | | | 1 |
| Saratoga Springs, N. Y | 13,839 | 5 | | | | | | | 1 | |
| Saugus, Mass | 10,210 | | 1 | | 7 | | 1 | | | |
| Sault Ste. Marie, Mich | 14,130 | 4 | 1 | | | | 1 | | | |
| Savannah, Ga | 69,250 | 26 | | | | | | | 4 | 1 |
| Schenectady, N. Y | 103,774 | 12 | 2 | | 5 | | | | 10 | 1 |
| Scranton, Pa | 149,541 | | 2 | | | | | | 2 | |
| Seattle, Wash | 366,445 | | 5 | | 14 | | 14 | | | |
| Shamokin, Pa | 21,274 | | 3 | | 15 | | | | | |
| Sioux Falls, S. Dak | 16,887 | 6 | 1 | | | | 4 | | | |
| Somerville, Mass | 88,618 | 20 | 1 | | | | 3 | | 5 | |
| South Bend, Ind | 70,967 | 9 | | | | | | | | 4 |
| Southbridge, Mass | 14,465 | 1 | | | | | | | | |
| Spartanburg, S. C | 21,985 | 4 | | | | | | | | |
| Spokane, Wash | 157,656 | | | | 17 | | 9 | | | |
| Springfield, Ill | 62,623 | 15 | | | | | | | | 1 |
| Springfield, Mass | 108,668 | 39 | | | | | | 1 | 3 | 4 |
| Springfield, Mo | 41,169 | 8 | | | | | | | | 3 |
| Springfield, Ohio | 52,296 | 9 | | | 2 | | | | 1 | 1 |
| Steelton, Pa | 15,759 | | 1 | | | | | | | |
| Steubenville, Ohio | 28,259 | 4 | | | | | | | 1 | |
| Stockton, Calif | 36,209 | 15 | | | | | 1 | | | 1 |
| Superior, Wis | 47,167 | 10 | 1 | | 4 | | | | | |
| Syracuse, N. Y | 158,559 | 37 | 1 | | 3 | | 3 | | 3 | 1 |
| Tacoma, Wash | 117,446 | | 5 | | 3 | | 1 | | | |
| Taunton, Mass | 36,610 | 16 | | | | | 1 | | 2 | 1 |
| Terre Haute, Ind | 67,361 | 12 | | | | | | | | 3 |
| Toledo, Ohio | 209,010 | 44 | 1 | | 135 | | 6 | | 7 | 4 |
| Topeka, Kans | 49,538 | 1 | | | | | | | 2 | |
| Trenton, N. J | 113,974 | 56 | 1 | | 29 | | 1 | | 7 | 6 |
| Troy, N. Y | 78,094 | 24 | 4 | 1 | | | | | 3 | 3 |
| Tulsa, Okla | 32,507 | | 1 | | | | 1 | | 18 | |
| Vallejo, Calif | 13,803 | 4 | | | | | | | | |
| Vancouver, Wash | 13,805 | | 1 | | | | | | | |
| Waco, Tex | 34,015 | 15 | | | | | | | | 4 |
| Wakefield, Mass | 12,947 | 5 | | | | | | | 2 | |
| Walla Walla, Wash | 26,067 | | 2 | | | | 1 | | | |
| Waltham, Mass | 31,011 | 4 | 1 | | 2 | | 1 | | | |
| Warren, Pa | 15,083 | | | | 1 | | | | 1 | |
| Washington, D. C | 369,282 | | 12 | 3 | 3 | | | | 15 | 11 |
| Washington, Pa | 22,076 | | | | 3 | | | | | |
| Waterbury, Conn | 89,201 | 5 | 2 | | 4 | | 3 | | 2 | 5 |

## DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Cont.

### City Reports for Week Ended July 12, 1919—Continued.

| City. | Population as of July 1, 1917 (estimated by U. S. Census Bureau). | Total deaths from all causes. | Diphtheria. | | Measles. | | Scarlet fever. | | Tuberculosis. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. |
| Watertown, Mass | 15,188 | 3 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1 |
| Wausau, Wis | 19,666 | 2 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| West Chester, Pa | 13,403 | ..... | 2 | ..... | ..... | ..... | 2 | ..... | 1 | ..... |
| Westfield, Mass | 18,769 | 8 | 2 | ..... | ..... | ..... | 2 | ..... | ..... | 3 |
| West Hoboken, N. J | 44,386 | 4 | ..... | ..... | ..... | ..... | ..... | ..... | 2 | ..... |
| West New York, N. J | 19,613 | 3 | ..... | ..... | ..... | ..... | ..... | ..... | 1 | ..... |
| West Orange, N. J | 13,964 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1 | ..... |
| Wheeling, W. Va | 43,657 | 11 | 1 | ..... | ..... | ..... | ..... | ..... | ..... | 3 |
| White Plains, N. Y | 23,331 | 1 | 3 | ..... | 1 | ..... | ..... | ..... | 1 | ..... |
| Wichita, Kans | 73,597 | 21 | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Wilkes-Barre, Pa | 78,334 | ..... | 1 | ..... | 9 | ..... | ..... | ..... | 4 | ..... |
| Wilkinsburg, Pa | 23,899 | ..... | 1 | ..... | 1 | ..... | 1 | ..... | ..... | ..... |
| Williamsport, Pa | 34,123 | ..... | ..... | ..... | 3 | ..... | ..... | ..... | 2 | ..... |
| Wilmington, Del | 95,369 | 34 | 2 | ..... | 1 | ..... | 1 | ..... | ..... | 2 |
| Wilmington, N. C | 30,400 | 9 | 1 | ..... | 1 | ..... | ..... | ..... | 1 | ..... |
| Winchester, Mass | 10,812 | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Winona, Minn | [1] 18,583 | ..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Winston-Salem, N. C | 33,136 | 20 | 1 | ..... | ..... | ..... | ..... | ..... | 2 | 2 |
| Winthrop, Mass | 13,105 | 2 | ..... | ..... | 1 | ..... | ..... | ..... | 1 | 2 |
| Woburn, Mass | 16,076 | 3 | ..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... |
| Worcester, Mass | 166,106 | 40 | 3 | ..... | 12 | ..... | ..... | ..... | 7 | 3 |
| Yonkers, N. Y | 103,066 | 19 | 8 | ..... | 1 | ..... | ..... | ..... | 1 | 9 |
| York, Pa | 52,770 | ..... | 1 | ..... | 1 | ..... | ..... | ..... | 1 | ..... |
| Youngstown, Ohio | 112,282 | 31 | 2 | 2 | 2 | 1 | 1 | ..... | 3 | ..... |
| Zanesville, Ohio | 31,320 | 7 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1 |

[1] Population Apr. 15, 1910.

# FOREIGN.

## AUSTRALIA.

### Epidemic Encephalitis Declared a Quarantinable Disease.

Under date of May 28, 1919, the Governor General of the Commonwealth of Australia declared epidemic encephalitis to be a quarantinable disease.

## CHINA.

### Epidemic Influenza—Canton.

Epidemic influenza was reported present at Canton, China, during the two weeks ended June 14, 1919.

### Further Relative to Cholera—Swatow and Vicinity.[1]

Cholera was declared present at Swatow, China, May 27, 1919. On May 28 a daily average occurrence of seven fatalities from cholera was reported, with a total to that date of about 100 fatal cases. The mortality was stated to be low as compared with that of previous epidemics.

Cholera was reported, May 28, to be seriously prevalent in a number of villages in the vicinity of Swatow and in the cities of Chaoyang and Kityang.

### Quarantine Against Swatow—Amoy.

According to information dated June 9, 1919, quarantine has been declared at Amoy, China, against Swatow, on account of cholera.

## MADAGASCAR.

### Epidemic Influenza—Tananarive.

During the two weeks ended May 11, 1919, epidemic influenza was reported present at Tananarive, Madagascar, with 75 fatal cases occurring among natives. During the same period there were reported 272 fatal cases of pneumonia among natives. (Total number of deaths reported among natives during the period, 523; total population, 64,003; natives, 62,410.)

[1] Public Health Reports, June 6, 1919, page 1294.

## UNION OF SOUTH AFRICA.

### Anthrax.

According to information dated March 24, 1919, anthrax has been reported to be spreading in the Cape Province, Free State, Natal, and Transvaal, with large losses in stock.

### Influenza—August–November, 1918.

The prevalence of influenza in the Union of South Africa in 1918 has been reported as follows:

Influenza appeared in South Africa in August, 1918, and attained its greatest incidence in October of that year. From August 1 to November 30, 1918, 11,726 fatal cases of influenza were notified among the white population; rate per 1,000, 8.26. Among the colored population there were 127,745 reported fatalities, or 27.19 per 1,000, making a total of 139,471 deaths, or 22.80 per 1,000 of the white and colored population combined.

The Cape Province appears to have suffered most severely, the city of Cape Town having had the greatest number of fatal cases, 6,342, as well as the highest death rate among the white population of any city in the Union. (Population of Cape Town, estimated, 173,050.) The mining town of Kimberley reported 4,861 fatalities from influenza (population in 1904, 34,331, of whom 13,556 were whites).

The total number of influenza cases which came to the attention of the health authorities was 2,616,805, or nearly 43 per cent of the population (6,110,000, estimated). As influenza was not a reportable disease, it was estimated that the number of persons affected with the disease was far in excess of the figures quoted.

According to information dated March 6, 1919, influenza has been declared a reportable disease in the Union of South Africa.[1]

### Influenza—East London.

During the week ended June 7, 1919, 23 cases of epidemic influenza were reported at East London, Cape of Good Hope State, Union of South Africa.

### Influenza—Johannesburg.

During the month of April, 1919, influenza was reported very prevalent at Johannesburg, Union of South Africa.

---

[1] Public Health Reports, May 30, 1919, p. 1232.

# CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.

## Reports Received During Week Ended Aug. 1, 1919.[1]

### CHOLERA.

| Place. | Date. | Cases. | Deaths. | Remarks. |
|---|---|---|---|---|
| China: | | | | |
| Canton | June 8–21 | 10 | 3 | |
| Swatow | June 2–21 | ..... | 118 | |
| India: | | | | |
| Bombay | May 25–31 | 5 | 5 | |
| Rangoon | May 18–31 | 15 | 9 | |
| Indo-China: | | | | |
| Cochin-China— | | | | |
| Saigon | May 26–June 8 | 85 | 51 | |
| Java: | | | | |
| East Java | ..... | ..... | ..... | Apr. 23–May 20, 1919: Cases, 252; deaths, 195. |
| Surabaya | Apr. 23–May 20 | 83 | 66 | |
| West Java | ..... | ..... | ..... | May 9–June 5, 1919: Cases, 35; deaths, 30. |
| Batavia | May 9–June 5 | 2 | ..... | |
| Philippine Islands: | | | | |
| Provinces | ..... | ..... | ..... | June 8–14, 1919: Cases, 97; deaths, 70. |
| Batangas | June 8–14 | 9 | 6 | |
| Bohol | ....do | 6 | 4 | |
| Bulacan | ....do | 20 | 12 | |
| Cavite | ....do | 7 | 2 | |
| Laguna | ....do | 5 | 6 | |
| Nueva Ecija | ....do | 6 | 6 | |
| Pampanga | ....do | 25 | 22 | |
| Pangasinan | ....do | 9 | 5 | |
| Tayabas | ....do | 10 | 7 | |

### PLAGUE.

| | | | | |
|---|---|---|---|---|
| China: | | | | |
| Canton | June 8–21 | 4 | 1 | Apr. 27–May 10, 1919: Cases, 3; present May 24–June 7, 1919. |
| Egypt | ..... | ..... | ..... | Jan. 1–June 25, 1919: Cases, 638; deaths, 339. |
| Cities— | | | | |
| Kantarah | June 19–20 | 4 | 2 | 2 cases European; septicemic. |
| Port Said | June 25 | 3 | ..... | 1 European. |
| Provinces— | | | | |
| Assiout | June 20–24 | 11 | 7 | |
| Beni-Souef | June 21 | 1 | 1 | |
| Fayoum | ....do | ..... | 1 | |
| Girgeh | June 21–25 | ..... | 2 | |
| Menoufia | June 21 | 4 | 1 | |
| Minieh | June 20–25 | 4 | 5 | |
| India | ..... | ..... | ..... | May 25–31, 1919: Cases, 891; deaths, 702. |
| Bombay | May 25–31 | 30 | 25 | |
| Karachi | June 8–14 | 25 | 27 | |
| Rangoon | May 18–24 | 11 | 10 | |
| Japan: | | | | |
| Yokohama | June 9–15 | 1 | 1 | |
| Java: | | | | |
| East Java | ..... | ..... | ..... | Apr. 23–May 20, 1919: Cases, 25: deaths, 25. |
| Surabaya | Apr. 23–May 20 | 6 | 6 | |

### SMALLPOX.

| | | | | |
|---|---|---|---|---|
| Canada: | | | | |
| New Brunswick— | | | | |
| Campbellton | June 15–21 | 1 | ..... | |
| Nova Scotia— | | | | |
| Halifax | July 6–12 | 20 | ..... | Present in Antigonish, Cumberland, Guysborough, Hants, and Halifax Counties. |
| Ontario— | | | | |
| Ottawa | June 15–21 | 2 | ..... | |
| Prince Edward Island— | | | | |
| Charlotte Town | July 6–19 | 6 | ..... | |
| Saskatchewan— | | | | |
| Regina | ..... | ..... | ..... | Jan. 1–Apr. 30, 1919: Cases, 41; deaths, 1. |

[1] From medical officers of the Public Health Service, American consuls, and other sources

## CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

### Reports Received During Week Ended Aug. 1, 1919—Continued.

#### SMALLPOX—Continued.

| Place. | Date. | Cases. | Deaths. | Remarks. |
|---|---|---|---|---|
| China: | | | | |
| Amoy | June 10–16 | | | Present. |
| Canton | June 8–21 | | | Do. |
| Chefoo | do | | | Do. |
| Chungking | June 1–14 | | | Do. |
| Hongkong | May 18–June 7 | 4 | 4 | |
| Nanking | June 8–21 | | | Do. |
| Czecho-Slovakia: | | | | |
| Prague | May 18–June 21 | 2 | 1 | |
| Egypt: | | | | |
| Alexandria | June 18–24 | 45 | 18 | |
| Cairo | | | | Jan. 15–28, 1919: Cases, 9; deaths, 1. |
| France: | | | | |
| Paris | June 15–21 | 2 | 3 | |
| Great Britain: | | | | |
| Cardiff | June 30–July 5 | 3 | | |
| London | June 8–July 5 | 9 | | |
| India: | | | | |
| Bombay | May 25–31 | 52 | 30 | |
| Karachi | June 8–14 | 7 | 7 | |
| Rangoon | May 18–31 | 56 | 24 | |
| Japan: | | | | |
| Nagoya | June 1–7 | 1 | 1 | |
| Taiwan | June 11–17 | 7 | | Entire island. |
| Tokyo | June 1–15 | 1 | | |
| Java: | | | | |
| West Java | | | | May 9–June 5, 1919: Cases, 232; deaths, 39. |
| Batavia | May 9–June 5 | 2 | | |
| Mesopotamia: | | | | |
| Bagdad | May 24–30 | 1 | | |
| Mexico: | | | | |
| Mexico City | June 22–July 5 | 4 | | |
| Vera Cruz | July 6–12 | 2 | | |
| Newfoundland: | | | | |
| Outports | | | | July 5–18, 1919: Cases, 10. |
| Siberia: | | | | |
| Vladivostok | June 8–15 | 9 | | |
| Spain: | | | | |
| Almeria | June 2–16 | 8 | | |
| Barcelona | June 13–19 | | 6 | |
| Cadiz | May 1–31 | | 1 | |

#### TYPHUS FEVER.

| | | | | |
|---|---|---|---|---|
| Egypt: | | | | |
| Alexandria | June 18–24 | 172 | 51 | |
| Cairo | | | | Jan. 15–28, 1919: Cases, 14; deaths, 8. |
| Port Said | | | | Jan. 9–15, 1919: Cases, 3; deaths, 3. |
| Great Britain: | | | | |
| Dundee | June 30–July 5 | 3 | | |
| Glasgow | June 28–July 5 | 4 | 1 | |
| Italy: | | | | |
| Genoa | June 25–July 1 | 62 | | 17 Austrian prisoners. |
| Japan: | | | | |
| Nagasaki | June 16–22 | 2 | | |
| Mesopotamia: | | | | |
| Bagdad | May 24–30 | 4 | 4 | |
| Mexico: | | | | |
| Mexico City | June 22–July 5 | 49 | | |
| Siberia: | | | | |
| Vladivostok | June 9–15 | 23 | | |

#### YELLOW FEVER.

| | | | | |
|---|---|---|---|---|
| Brazil: | | | | |
| Bahia | May 11–17 | 4 | 3 | |
| Peru: | | | | |
| Paita | July 10–22 | 8 | 5 | Department of Piura. |
| Piura | do | 46 | 10 | Do. |

## CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

### Reports Received from June 28 to July 25, 1919.

#### CHOLERA.

| Place. | Date. | Cases. | Deaths. | Remarks. |
|---|---|---|---|---|
| Ceylon: | | | | |
| Colombo | Apr. 20–26 | 10 | | |
| China: | | | | |
| Foochow | July 3 | | | Present. |
| India: | | | | |
| Bombay | Apr. 28–May 24 | 22 | 19 | |
| Calcutta | May 4–31 | | 476 | |
| Madras | May 18–24 | 10 | 8 | |
| Rangoon | Apr. 28–May 17 | 43 | 36 | |
| Indo-China: | | | | |
| Cochin-China— | | | | |
| Saigon | Apr. 21–May 18 | 113 | 83 | City and district. |
| Japan: | | | | |
| Pescadores Islands | July 14 | 40 | | In one village. |
| Java: | | | | |
| East Java | | | | Apr. 2–22, 1919: Cases, 301; deaths, 264. |
| Mid-Java | | | | Mar. 28–Apr. 24, 1919: Cases, 1,595; deaths, 1,225. |
| Samarang | Mar. 28–Apr. 24 | 75 | 74 | |
| West Java | | | | May 2–22, 1919: Cases, 35; deaths, 13. |
| Batavia | May 2–8 | 10 | 5 | |
| Persia: | | | | |
| Ardebil | May 2 | | | Present. |
| Enzeli | Apr. 23 | 1 | | |
| Khorram-Ahab | May 3 | | | Outbreak. |
| Mianedge | Apr. 28 | | | Do. |
| Zindjan | Apr. 21–May 4 | | 40 | |
| Philippine Islands: | | | | |
| Manila | Apr. 26–May 31 | 7 | 2 | |
| Provinces | | | | May 4–24, 1919: Cases, 567; deaths, 383. |
| Batangas | May 4–24 | 25 | 23 | |
| Bulacan | do | 48 | 25 | |
| Cebu | do | 162 | 84 | |
| Laguna | do | 20 | 15 | |
| Mindoro | do | 19 | 14 | |
| Misamis | do | 9 | 2 | |
| Pampanga | do | 166 | 131 | |
| Tayabas | do | 118 | 89 | |
| Philippine Islands: | | | | |
| Provinces | | | | June 1–7, 1919: Cases, 67; deaths, 47. |
| Batangas | June 1–7 | 16 | 13 | |
| Bulacan | do | 12 | 7 | |
| Nueva Ecija | do | 4 | 1 | |
| Pampanga | do | 23 | 16 | |
| Tayabas | do | 12 | 10 | |
| Siam: | | | | |
| Bangkok | Apr. 13–May 17 | | 693 | |

#### PLAGUE.

| | | | | |
|---|---|---|---|---|
| China: | | | | |
| Canton | May 25–31 | | | Present. |
| Foochow | May 18–24 | | | Do. |
| Hongkong | June 15–28 | 42 | 33 | |
| Ecuador: | | | | |
| Posorja | June 1–15 | 2 | 1 | Bathing place 65 kilometers from Guayaquil. |
| Egypt | | | | Jan. 1–June 11, 1919: Cases, 539; deaths, 300. |
| Cities— | | | | |
| Cairo | May 15 | | 1 | |
| Port Said | May 1–4 | 1 | 2 | |
| Suez | June 5–11 | 3 | 3 | |
| Provinces— | | | | |
| Assiout | May 17–June 11 | 69 | 34 | |
| Beni-Souef | May 19–June 5 | 5 | 4 | |
| Fayoum | May 18–June 11 | 8 | 6 | |
| Girgeh | May 15 | 3 | 2 | |
| Menoufia | June 8 | 1 | | |
| Minieh | May 15–June 11 | 25 | 10 | |
| Hawaii: | | | | |
| Paauhau | July 19 | 1 | | |

## CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

### Reports Received from June 28 to July 25, 1919—Continued.

#### PLAGUE—Continued.

| Place. | Date. | Cases. | Deaths. | Remarks. |
|---|---|---|---|---|
| India | | | | Apr. 27-May 24, 1919: Cases, 6,585: deaths, 5,402. |
| Bombay | Apr. 28-May 24 | 212 | 141 | |
| Calcutta | May 18-31 | | 30 | |
| Karachi | May 18-June 7 | 109 | 93 | |
| Rangoon | Apr. 28-May 17 | 30 | 29 | |
| Indo-China: | | | | |
| Cochin-China— | | | | |
| Saigon | Apr. 21-May 18 | 18 | 14 | City and district. |
| Japan: | | | | |
| Yokohama | June 9 | 1 | | |
| Java: | | | | |
| East Java | | | | Apr. 8-22, 1919: Cases, 52; deaths, 52. |
| Mesopotamia: | | | | |
| Bagdad | Apr. 19-May 16 | 267 | 201 | |
| Basra | May 3-10 | 108 | 89 | Including suburb of Ashar. Total from date of outbreak to May 19, 1919, 288 cases. |
| Siam: | | | | |
| Bangkok | Apr. 27-May 17 | 2 | 2 | |
| Straits Settlements: | | | | |
| Singapore | Apr. 13-26 | 2 | 1 | |
| On vessel: | | | | |
| S. S. City of Sparta | Apr. 19-21 | 1 | 1 | From Bombay Apr. 3, 1919; case, a soldier; at sea. |
| Do | May 13-17 | 1 | 1 | At Liverpool: case, a native member of the crew. (Public Health Reports, June 27, 1919, p. 1463.) |

#### SMALLPOX.

| | | | | |
|---|---|---|---|---|
| Arabia: | | | | |
| Aden | May 13-19 | | 1 | |
| Austria | | | | Mar. 9-Apr. 5, 1919: Cases, 92. |
| Salzburg | Mar. 9-Apr. 5 | 50 | | |
| Vienna | do | 17 | | |
| Azores: | | | | |
| St. Michaels | June 7-20 | 1 | | |
| Brazil: | | | | |
| Bahia | Apr. 20-May 3 | 2 | | |
| Canada: | | | | |
| British Columbia— | | | | |
| Vancouver | June 15-July 5 | 4 | | |
| New Brunswick— | | | | |
| Moncton | July 6-12 | 1 | | |
| Nova Scotia— | | | | |
| Cities— | | | | |
| Halifax | June 15-July 5 | 69 | | |
| Sydney | June 8-21 | 3 | | |
| Counties— | | | | |
| Antigonish | do | | | Present. |
| Guysborough | do | | | Do. |
| Halifax | do | | | Do. |
| Hants | do | | | Do. |
| Ontario— | | | | |
| Province | | | | May 1-31, 1919: Cases, 98: deaths, 2. |
| Hamilton | June 29-July 5 | 1 | | |
| Harwich | May 1-31 | 14 | 2 | Township in Kent County. |
| Ottawa | June 15-July 5 | 2 | | |
| Peterborough | June 15-21 | 4 | | |
| Walpole Island | May 1-31 | 42 | | Kent County. Island in Lake St. Clair. Among Indians. |
| Quebec— | | | | |
| Montreal | June 8-28 | 18 | | |
| Quebec | June 29-July 12 | 5 | | June 8-14, 1919: 10 cases. On incoming vessels. |
| Ceylon: | | | | |
| Colombo | May 1-24 | 3 | | |
| China: | | | | |
| Amoy | May 20-June 2 | | 13 | |
| Canton | May 18-31 | | | Present. |
| Chungking | May 4-31 | | | Do. |
| Foochow | May 18-31 | | | Do. |
| Nanking | May 25-June 7 | | | Do. |

## CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

### Reports Received from June 28 to July 25, 1919—Continued.

#### SMALLPOX—Continued.

| Place. | Date. | Cases. | Deaths. | Remarks. |
|---|---|---|---|---|
| Chosen (Korea): | | | | |
| Chemulpo | Apr. 1-May 31 | 19 | 4 | |
| Fusan | do | 294 | 81 | |
| Seoul | do | 3 | 1 | |
| Czecho-Slovakia: | | | | |
| Prague | May 18-June 14 | 9 | 1 | |
| Egypt: | | | | |
| Alexandria | May 14-June 21 | 188 | 77 | |
| Cairo | Jan. 2-14 | 8 | 3 | |
| Finland | | | | Apr. 16-May 15, 1919: Cases, 217. |
| Provinces— | | | | |
| Abo Och Bjorneborg | Apr. 16-May 15 | 5 | | |
| Kuopio | do | 12 | | |
| Nyland | do | 3 | | |
| St. Michael | do | 26 | | |
| Tavastehus | do | 24 | | |
| Vasa | do | 4 | | |
| Viborg | do | 132 | | |
| France: | | | | |
| Marseille | May 1-31 | | 2 | |
| Paris | May 11-June 14 | 10 | 3 | |
| Great Britain: | | | | |
| Cardiff | June 15-21 | 1 | | |
| Dundee | June 1-7 | 1 | | |
| Glasgow | June 8-21 | 5 | | |
| London | May 25-June 7 | 3 | | |
| Greece: | | | | |
| Saloniki | May 15-21 | | 18 | |
| India: | | | | |
| Bombay | Apr. 28-May 24 | 242 | 161 | |
| Calcutta | May 4-31 | | 353 | |
| Karachi | May 4—June 7 | 18 | 9 | |
| Madras | May 18-24 | 23 | 11 | |
| Rangoon | Apr. 28-May 17 | 93 | 43 | |
| Indo-China: | | | | |
| Cochin-China— | | | | |
| Saigon | Apr. 21-May 18 | 11 | 4 | City and district. |
| Italy: | | | | |
| Leghorn | June 16-22 | 1 | | |
| Messina | June 1-21 | 13 | | Province, June 8-21, 1919: Cases, 23; deaths, 3. |
| Milan | Mar. 1-Apr. 30 | 20 | 5 | |
| Milazzo | June 1-7 | 1 | 1 | |
| Naples | June 2-22 | 96 | 79 | |
| Palermo | May 2-June 20 | 39 | 5 | |
| Turin | May 18-June 22 | 4 | 1 | |
| Venice | May 26-June 1 | 2 | | |
| Japan: | | | | |
| Kobe | May 4-31 | 48 | 17 | |
| Taiwan | May 21-June 10 | 2 | 4 | Entire island. |
| Tokyo | May 1-31 | 1 | | |
| Yokohama | May 26-June 1 | 1 | | |
| Java: | | | | |
| East Java | | | | Apr. 9-15, 1919: Cases, 1. |
| West Java | | | | May 2-22, 1919: Cases, 187; deaths, 42. |
| Batavia | Apr. 13-May 1 | 2 | 1 | |
| Manchuria: | | | | |
| Dairen | May 13-June 2 | 3 | 2 | |
| Mexico: | | | | |
| Mexico City | June 1-14 | 16 | 1 | |
| Piedras Negras | June 22-28 | 2 | 2 | |
| Newfoundland: | | | | |
| St. Johns | June 13-July 4 | 3 | | June 13-27, 1919: Outports, 21 cases. |
| Philippine Islands: | | | | |
| Manila | May 11-17 | 1 | | |
| Portugal: | | | | |
| Oporto | June 2-14 | 17 | 9 | |
| Portuguese East Africa: | | | | |
| Laurenco Marques | Apr. 1-May 31 | 2 | 1 | |
| Spain: | | | | |
| Almeria | May 18-31 | 40 | 5 | |
| Barcelona | May 15-21 | 3 | | |
| Bilbao | May 1-10 | 1 | | |
| Cadiz | Apr. 1-30 | | 4 | |
| Madrid | May 1-31 | 3 | | |
| Valencia | May 11-June 7 | 174 | 12 | |
| Straits Settlements: | | | | |
| Singapore | Mar. 24-May 10 | 4 | 2 | |

## CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

### Reports Received from June 28 to July 25, 1919—Continued.

#### SMALLPOX—Continued.

| Place. | Date. | Cases. | Deaths. | Remarks. |
|---|---|---|---|---|
| Tunis: | | | | |
| Tunis | June 15-21 | | 1 | |
| On vessels: | | | | |
| S. S. Eastern | Apr. 25-26 | 2 | 1 | Death at sea. Second case landed at Woodman's Quarantine Station, Fremantle, Australia, Apr. 29. Vessel from England via Egypt and Colombo. |
| S. S. Karoa | Apr. 19 | 1 | | Landed at Colombo. Vessel from the United Kingdom via Egypt and Colombo. |
| S. S. Khyber | Apr. 10-May 4 | 4 | | From Liverpool, via Port Said, Suez, and Colombo. One case landed at Port Said Apr. 10, 2 cases at Colombo Apr. 22 one at quarantine, Fremantle, Australia, May 4, 1919. |

#### TYPHUS FEVER.

| | | | | |
|---|---|---|---|---|
| Algeria: | | | | |
| Algiers | May 1-31 | 76 | 8 | |
| Austria | | | | Mar. 23-Apr. 5, 1919: Cases, 118. |
| Vienna | Mar. 23-Apr. 5 | 9 | | |
| China: | | | | |
| Changsha | May 11-17 | 1 | 1 | |
| Chosen (Korea): | | | | |
| Chemulpo | Apr. 1-May 31 | 54 | 8 | |
| Fusan | May 1-31 | 4 | 1 | |
| Seoul | Apr. 1-May 31 | 79 | 14 | |
| Czecho-Slovakia: | | | | |
| Prague | May 18-24 | 1 | | |
| Egypt: | | | | |
| Alexandria | May 14-June 21 | 253 | 185 | |
| Cairo | Jan. 2-14 | 13 | 2 | |
| Finland | | | | Apr. 16-May 15, 1919: Cases, 15. |
| Provinces— | | | | |
| Abo Och Bjorneborg | May 15 | 1 | | |
| Nyland | Apr. 16-May 15 | 3 | | |
| St. Michael | do | 8 | | |
| Viborg | do | 3 | | |
| Germany | Jan. 12-Feb. 22 | 344 | | Military. |
| Do | Feb. 23-Mar. 22 | 220 | | Civil. |
| Do | Mar. 23-Apr. 12 | 333 | | Civil, military, prisoners of war, deserters. |
| Great Britain: | | | | |
| Glasgow | June 8-21 | 9 | 1 | |
| Greece: | | | | |
| Saloniki | May 15-21 | | 2 | |
| Hungary | | | | Feb. 24-May 9, 1919: Cases, 258. |
| Budapest | Feb. 24-May 9 | 124 | 6 | |
| Debreczin | do | 42 | | |
| Italy | | | | Apr. 28-June 8, 1919: Cases, 3,470—Austrian prisoners, 3,321; Italian soldiers, 82; civil population, 67. |
| Naples | May 12-June 22 | 50 | 16 | |
| Venice | Apr. 27-June 14 | 58 | 9 | |
| Mesopotamia: | | | | |
| Bagdad | Apr. 19-May 23 | 26 | 16 | |
| Mexico: | | | | |
| Mexico City | May 4-June 21 | 162 | | |
| Newfoundland: | | | | |
| St. Johns | June 21-27 | 1 | | From vessel. |
| Palestine: | | | | |
| Jaffa | | | | Oct. 22-Dec. 22, 1918: Cases, 8; deaths, 3. |
| Portugal: | | | | |
| Oporto | June 1-15 | 52 | | |
| Spain: | | | | |
| Barcelona | May 15-21 | | 1 | |
| Madrid | May 1-31 | | 1 | |
| Tunis: | | | | |
| Tunis | May 24-June 21 | 3 | | |

## CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

### Reports Received from June 28 to July 25, 1919—Continued.

YELLOW FEVER.

| Place. | Date. | Cases. | Deaths. | Remarks. |
|---|---|---|---|---|
| Brazil: | | | | |
| Bahia | Apr. 12-May 11 | 18 | 12 | |
| Ecuador: | | | | |
| Guayaquil | May 1-31 | 1 | 1 | |
| Naranjito | May 1-June 15 | 2 | 1 | |
| Mexico: | | | | |
| Merida | June 30-July 1 | 5 | 2 | State of Yucatan. |
| Peru: | | | | |
| Paita | Reported July 17 | 8 | 2 | |
| Piura | do | 30 | | |
| Salvador: | | | | |
| La Union | July 6 | 2 | | |
| St. Miguel | June 24-July 6 | 4 | | 75 miles from city of San Salvador. |
| San Salvador | do | 1 | 1 | |